Texas Department of Transportation

Final Report of Findings and Recommendations

Consumer Services Auditable Unit

August 2007

DYE MANAGEMENT GROUP, INC.

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Independent Audit Services for Consumer Services Auditable Unit

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Executive Summary

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This document presents a summary of findings and recommendations of the performance audit of the consumer services auditable unit. This audit was performed by Dye Management Group, Inc. in conjunction with TxDOT's Audit Oversight Committee (AOC).

This audit of the consumer services auditable unit is part of a comprehensive performance audit of the Texas Department of Transportation (TxDOT). This audit was performed as required by Title 6, Chapter 201.109(b) (5) of the Transportation Code, which requires an independent performance audit of TxDOT management and business operations to be completed in 2007.

This section provides an overall summary of the consumer services audit. It presents a brief overview of the scope, a discussion of our audit approach, and a summary of the various study areas defined and performed as part of the audit scope. This section also provides a summary of the key findings and recommendations from each of the nine study areas as well as a summary of a number of cross-program findings and recommendations. Lastly, this section includes a summary of the anticipated FTE impacts of the recommendations in each study area.

Section I of this report provides a more detailed overview of the audit process. Sections II – X present the detailed findings and recommendations for each study area within the consumer services auditable unit.

A. Scope of the Consumer Services Auditable Unit

The overall focus of the consumer services performance audit was to conduct a review, analysis, and evaluation of those activities, tools, and procedures used by TxDOT for providing services that affect individual members of the traveling public or businesses responsible for transporting people and goods. The scope of the consumer services performance audit included the following areas:

- Motor carrier operations.
- Motor vehicle dealer/distributor operations.
- Grant programs.
- Vehicle title and registration operations.
- Revenue-neutral operations with a primary emphasis on the outdoor advertising control program.
- Travel operations.

B. Overview of Audit Approach

The audit approach for the consumer services performance audit consisted of three phases:

- **Risk analysis**. The purpose of the risk analysis phase was to conduct a high-level review of the various scope areas in order to recommend areas for more in-depth analysis during the later audit analysis phase. The risk analysis process obtained input from TxDOT leadership, policy-makers, TxDOT's business partners, and other external stakeholders and perspectives from industry experts regarding risks and opportunities. The audit team then used this input to develop recommendations regarding the scope for the audit.

  In order to achieve the appropriate level of breadth and depth in our examination of the auditable unit, the Dye Management Group, Inc. team conducted 49 issue identification interviews with a wide range of TxDOT leadership, management, staff, and stakeholders across the program areas. Based on these interviews, review of documentation, and other fact-finding, Dye Management Group, Inc. first identified and then ranked a number of potential risks and/or opportunity areas that were candidates for further analysis and study.

- **Audit plan development**. This phase involved developing a methodology, referred to as an audit plan, for performing the audit based on the scope recommended in the risk analysis. As part of this phase, Dye Management Group, Inc. worked with the AOC to define, in detail, nine specific study areas to be analyzed further during the audit analysis phase.

- **Audit analysis**. This phase involved conducting the fact-finding, data collection, and analysis required to address the audit scope defined in the risk analysis. This phase also included the development of detailed findings and recommendations in each area studied, the development of an audit report documenting these findings and recommendations, and the presentation of the audit findings to the Texas Transportation Commission.

C. Results of Initial Risk Analysis Phase

During the initial risk analysis phase, the Dye Management Group, Inc. audit team identified 36 risks and opportunities within each of the six program areas in the consumer services auditable unit. The audit team then evaluated each identified risk and ranked each risk as high, medium, or low. The basis for this risk ranking was a qualitative assessment of the degree of risk based on two factors:

- Materiality based on the potential size of the financial, operational, or other impact to TxDOT from the risk identified.
- Likelihood or risk of occurrence of the impact.

Exhibit ES-1 summarizes the risks by program area within the consumer services auditable unit. Exhibit ES-2 identifies those risks by program area, which were ranked as high.

Exhibit ES-1: Summary of Risks Identified by Program Area

Program Area	Total Risks Identified	High	Medium	Low
Motor Carrier Operations	4	2	2	0
Motor Vehicle Dealer/Distributor Operations	4	2	2	0
Grants Programs	8	3	4	1
Vehicle Title and Registration Operations	6	4	2	0
Revenue-neutral Operations (Outdoor Advertising Control)	6	0	5	1
Travel Operations	5	2	2	1
Multi-Program	3	3	0	0
Total: Consumer Services Auditable Unit	36	16	17	3

Exhibit ES-2: Summary of Risks Ranked as High

Risk ID	Functional Area	Description
MC1	Motor Carrier	Delays in TxDOT's turnaround time for processing oversize/overweight permits
MC2	Motor Carrier	Non-competitive classification and compensation of permit specialists
MV1	Motor Vehicle Dealers/Distributors	Limited control over dealer-issued temporary tags
MV2	Motor Vehicle Dealer/Distributors	Extremely long duration for complaint resolution
GR1	Grants Management	Limited grants or contracts management experience and/or training for district staff responsible for administering various grant programs
GR2	Medical Transportation	Need for improving coordination and relationship with the HHS enterprise
GR3	Medical Transportation	Need to further assess impact of various medical transportation operational initiatives on client service and overall program efficiency and effectiveness
VTR1	Vehicle Title and Registration	Inability to easily implement program changes as the result of aging technology

Risk ID	Functional Area	Description
VTR2	Vehicle Title and Registration	Dependence of VTR Division on the Vision 21 initiative to support the transformation of the organization and to more effectively deliver vehicle titling and registration services
VTR3	Vehicle Title and Registration	Lack of a common customer approach and full functioning integration strategy with the Department of Public Safety (DPS)
VTR4	Vehicle Title and Registration	Limited use of the Internet as a service delivery channel for performing vehicle titling and registration functions
TO1	Travel	Alignment of Travel Division functions with TxDOT's overall strategic objectives
TO2	Travel	Opportunities for revenue generation at travel information centers and safety rest areas
MP1	Multi-Program	Limited coordination or economies of scale in management of call center capabilities across divisions
MP2	Multi-Program	Limited integration between the various motor vehicle services functions within TxDOT
MP3	Multi-Program	Dependence upon technology to implement critical business change

After identifying, analyzing, and ranking the risks in each program area, the audit team then reevaluated these risks on an overall basis across the auditable unit and developed specific recommendations for detailed study areas that the team determined merited further analysis and study during the audit analysis phase. An audit work plan was then developed, in conjunction with TxDOT's AOC, to manage the detailed audit analysis effort in each of the study areas.

D. Audit Analysis Phase Scope and Approach

Through the risk prioritization process conducted during the risk analysis phase, the Dye Management Group, Inc. team identified nine study areas for in-depth analysis during the audit analysis phase. The scope, key findings, and a summary of our recommendations for each of these study areas are presented in Section E – Section M of this executive summary.

Our audit approach assumed that in each study area, a technical working group of stakeholders would be assigned to provide guidance and input to the audit team. This stakeholder team generally consisted of TxDOT management and staff responsible for managing the elements of the study area and external stakeholders representing various elements of the 'public' impacted by the study area where appropriate.

Across all of the study areas, more than 72 TxDOT managers and staff and 26 external stakeholders participated on these stakeholder teams. This included representatives of the following external stakeholder groups:

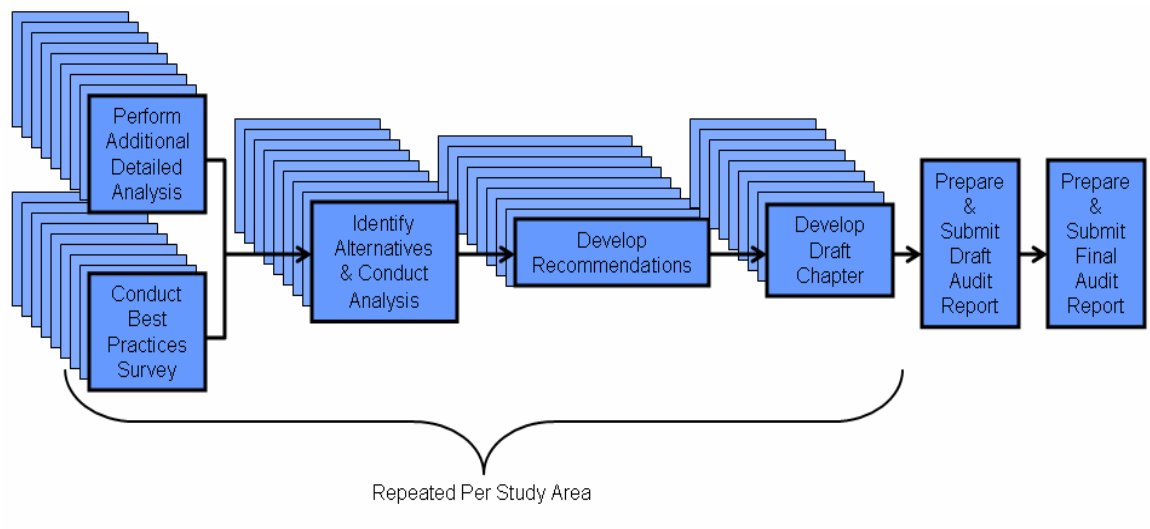
- County tax assessor-collectors.
- Representatives from the Texas Department of Public Safety.
- FHWA Texas Division staff.
- Motor carriers.
- Franchise motor vehicle dealers.
- Independent motor vehicle dealers.
- Travel and tourism industry representatives.
- Grant recipients from various TxDOT programs.
- Medical transportation providers.
- Medicaid client representatives.
- Outdoor advertising industry representatives.
- Environmental advocacy groups who monitor the state's regulation of the outdoor advertising industry.

While our audit analysis approach varied somewhat by specific study area, it generally consisted of the following elements:

- Additional detail analysis of the subject area including review of documentation and additional detailed interviews of TxDOT and stakeholder staff.
- Conducting a best practices survey of peer states and organizations where appropriate to supplement knowledge of the audit team.
- Identifying and conducting detailed analysis of potential alternatives for addressing identified risks and reviewing this analysis with the stakeholder team.
- Developing recommendations and, where appropriate, a high-level transition strategy for implementing these recommendations.

Our work approach for the audit analysis phase is illustrated in Exhibit ES-3.

Exhibit ES-3: Summary of Audit Analysis Approach



TxDOT management and staff and TxDOT's external stakeholders were extremely cooperative and helpful in the completion of this audit. Materials and resources were made available to the audit team as needed. In addition, all stakeholder group participants provided exceptional guidance and input to the audit team. Their participation ensured that the findings were pertinent and that the recommendations would be based on an accurate portrayal of the mission, scope, and functions of the consumer services activities within TxDOT.

The remainder of this executive summary highlights the findings and recommendations of each of the nine study areas, followed by a brief discussion of multi-program issues and a summary of FTE impacts.

E. Evaluation of Potential Strategies for Improving Turnaround Time for Oversize/Overweight Permits

1. Study area scope

This study area involved an assessment of potential strategies for improving the turnaround time by the Motor Carrier Division (MCD) for the processing of oversize/overweight permits. It included a detail assessment and evaluation of various alternatives for improving turnaround times for this function. Alternatives evaluated included implementing the planned Texas Permit Routing Optimization System (TxPROS) application and further strengthening of the existing internal permitting process; establishing partnerships with the Texas Motor Transportation Association and other potential organizations that could provide these services for their members, and business process outsourcing of all or some part of the oversize/overweight function. Likewise, this study area also included an assessment of the value of

redirecting some of the headcount that is expected to be freed up as a result of the implementation of TxPROS or other potential solutions to address improving turnaround times in completing investigations by MCD's consumer protection and motor carrier investigatory functions.

2. Summary of findings

Dye Management Group, Inc. found that MCD is facing challenges in terms of turnaround times for processing applications for oversize/overweight permits. Our findings included the following:

- The audit team found that MCD is a generally well managed organization that, over the last several years, has been struggling with significant increases in permit application volume without a parallel increase in staff resources and limited technology support. There has also been a substantial increase in the number of super loads, which require much more extensive analysis and review prior to issuing a permit. These trends in terms of the volume and complexity of permits are expected to continue for the foreseeable future.
- This increase in the volume and complexity of permits is exacerbated by turnover among permit officers. During the previous seven fiscal years, the turnover of permit officers has averaged 23% overall with a 12% turnover rate during the last fiscal year. The cost of interviewing, hiring, and training new staff is substantial and averages $30,000 for each vacancy during the first six months of employment.
- The increased volumes and complexity of the loads being transported combined with staff turnover and the fact that most permit applications must be processed manually, has resulted in increased turnaround times for processing oversize/overweight permits. Because of the increased turnaround time, carriers are faced with delaying shipments which results in financial losses to the carrier of approximately $100 per load per hour, which is ultimately passed on to the public. Alternatively, some carriers may choose to transport oversize/overweight loads without a permit, which threatens the safety of the traveling public and could result in structural damage to the state's transportation assets. If a carrier fails to get a permit, this also represents lost revenue to TxDOT.
- MCD has developed requirements for and is currently in the process of procuring TxPROS, an automated routing system. It is MCD's objective to leverage the new automated routing system to process many of the routine permit requests and reduce the turnaround time of these requests, while focusing MCD staff on the increasing number of super load permit requests. The TxPROS project should reduce the volume of single trip routing (STR) permit applications now manually processed by MCD staff. The TxPROS system is projected to be able to initially issue up to one half of each day's STR permit volume. This equates to 864 TxPROS-issued STR permits daily or the workload of approximately 18 permit officers.

- A number of other states have attempted automated routing solutions with different degrees of success to date. The requirements and functionality envisioned in the Texas solution are more extensive than those implemented to date in other states. This creates an additional element of risk in terms of implementing and deploying the automated solution, realizing a return on investment, and achieving a reduction in permit turnaround times in the timeframe desired by TxDOT.
- Alternatively, some states, most notably Florida, have chosen to privatize some of their permit issuance process. Florida's operational model, however, is substantially different from the TxDOT model and requires the permit applicant to accept a higher degree of risk by requiring applicants to route their vehicles and loads themselves.

3. Highlights of recommendations

Dye Management Group, Inc. conducted an analysis of several alternatives for improving the overall delivery of the oversize/overweight permitting function, including an evaluation of a privatization approach using Florida as a case study and the implementation of a new in-house intelligent routing application as envisioned under the planned TxPROS initiative. Based on this analysis, Dye Management Group, Inc. developed the following recommendations:

- Dye Management Group, Inc. recommends that TxDOT proceed with development and implementation of the TxPROS initiative. The potential for major improvements in permit turnaround time hinges upon the successful and timely implementation of this capability. Selection of a software vendor for the TxPROS initiative is in the final stages, and the audit team believes that the implementation of this software solution provides the best opportunity for driving substantive change in this business process within the next two to three years. The differences between Florida and Texas operations is significant, and the implementation of a privatized model would most likely require a longer elapsed time and an additional two to three-fold level of effort by a contractor to implement a similar program with TxDOT.
- In conjunction with the implementation of TxPROS, Dye Management Group, Inc. recommends that MCD take a number of interim steps to both address immediate business challenges and develop contingencies for any delays in the implementation of TxPROS. This interim action plan includes the following steps:
  - Leveraging the additional positions recently authorized by the Texas Legislature to support this function and/or engaging temporary employees to implement a single application processing queue regardless of the method by which the application is received versus the current three queue system in which phone, fax, and Internet requests are managed differently.

- Encouraging additional organizations and especially permit services to join the existing TxDOT self-service permitting program known as the Remote Permit Service (RPS).
- Updating the risk management plan for TxPROS with specific contingencies for changes to existing systems and/or adjustments to business processes that may be triggered if the TxPROS implementation encounters any unanticipated delays.

- The institutionalization of TxPROS is anticipated to make available approximately 15 to 22 FTEs depending on the specific envelope sizes which can ultimately be performed on a self-service basis through TxPROS. The audit team believes, however, that the efficiency of the MCD investigatory functions should be improved by first providing current staff with updated hardware and other technology and the implementation of case management software prior to adding staff to these functions. Once the enhanced technology is initially applied, it may then be appropriate to assign some additional staff to this function incrementally to fully meet the outcome-based level of service targets established as part of MCD's detail business planning.

F. Opportunities for Greater Synergies between Vehicle Registration, Other Motor Vehicle Functions within TxDOT and the Driver Licensing Function, and Vehicle Inspection Functions in the Department of Public Safety

1. Study area scope

The primary objective of this audit study area was to identify and evaluate the potential for greater synergies between vehicle registration, other motor vehicle functions within TxDOT, the toll tag functions within TxDOT, the drivers licensing and vehicle inspection function in the Department of Public Safety, and the International Fuel Tax Agreement (IFTA) program administered by the Texas Comptroller of Public Accounts.

2. Summary of findings

The study team identified a number of issues related to the need for additional coordination among the motor vehicle services functions within TxDOT and other agencies. The team also identified a number of potential synergy points across these various functions. Our findings included the following:

- The motor vehicle services functions within TxDOT operate within the department with great autonomy. While the Appropriations Act and division level planning documents and output measures provide some strategic direction

to these functions, the department's published strategic plan concentrates on infrastructure-related activities and does not provide meaningful direction for the motor vehicle services functions.

- These divisions operate in a working environment that is made more complex by the large number of statutes in place often defining processes in detail. The same is true of many fees. The statutes and fees are rarely subject to a comprehensive review and tend to be updated on a piecemeal basis.
- To a large degree, the three motor vehicle services functions serve different customer bases related to vehicle administration. The Motor Carrier Division (MCD) deals largely with motor carriers, the Motor Vehicle Division (MVD) concentrates on vehicle dealer licensing, and Vehicle Titles and Registration (VTR) handles issues related to vehicle owners. There is only limited overlap between their operations. We also noted some potential for closer working relationships between the TxTag electronic toll operations and the vehicle registration functions.
- There are currently some challenges in achieving greater synergy between the driver licensing programs in DPS and the vehicle programs at TxDOT, given the driver licensing program's focus on implementation of the federally mandated Real ID requirements. However, there are some opportunities for a closer working relationship between the DPS vehicle inspection programs and VTR, which should be pursued in the near-term.
- There are multiple items displayed on Texas vehicles, including registration and inspection stickers with differing expiration dates, together with toll tag readers and license plates.
- Many business improvement programs have been identified by the motor vehicle services divisions for possible implementation over the next several years. There is a need for careful management of these initiatives and coordination across functions as part of these initiatives wherever appropriate.

3. Highlights of recommendations

The Dye Management Group, Inc. team's recommendations in terms of additional synergy opportunities between the motor vehicle services functions within TxDOT and between TxDOT and other state agencies include the following:

- It is recommended that TxDOT create the position of Assistant Executive Director for Motor Vehicle Services, with responsibility for MCD, MVD, VTR, and also the TxTag electronic tolling program currently housed within the Texas Turnpike Authority Division. The Assistant Executive Director will help to ensure that the motor vehicle divisions are an integral part of the Department's strategies and plans. This position will also lead an integrated strategic planning effort among the various motor vehicle services functions.

The study team reached this recommendation for organizing the motor vehicle services functions within TxDOT under an Assistant Executive Director position after analyzing several different organizational alternatives. These alternatives included, among others, maintaining the status quo, merging the three existing TxDOT motor vehicle service functions into a single division within TxDOT, creating a separate state-level department of motor vehicles including the driver license and vehicle inspection functions within DPS, and creating a virtual department linking TxDOT and other agencies motor vehicle services functions through one or more common customer portals. We found that providing a point of coordination through a single executive responsible for motor vehicle services functions at TxDOT provided the benefits of an executive level resource dedicated to motor vehicle services, improved business planning among the various functions, some potential for additional economies of scale, and a clear executive level point-of-contact within TxDOT for motor vehicle services opportunities with other agencies, while still recognizing and preserving the unique missions and different customer bases of each of the existing motor vehicle services functions within TxDOT.

The study team understands that there are some concerns within TxDOT about the impact of this recommendation. One area of concern is the shifting of TxTag into the new umbrella motor vehicle services organization. Issues in this regard include the level of integration and existing linkages between TxTag and its customer service center and toll collections and toll operations, the potential impact on relationships between TxTag and other toll authorities in Texas, and any potential concerns on the part of bond holders. These concerns will require additional discussion and coordination with the Turnpike Authority prior to the full implementation of this recommendation.

- It is recommended that TxDOT conduct a comprehensive review of statutes, fees, and vehicle classifications to streamline, simplify, and update these to take advantage of current and emerging technology. As part of this initiative, TxDOT should work with the Texas Legislature to seek a change in statute philosophy from the current approach where detailed specifications are contained in statute to broader enabling legislation, with the detailed specifications and specific fees established through administrative rule.
- It is recommended that TxDOT should work with DPS to determine whether a common customer approach between VTR and Driver Licensing at DPS is a practical solution. If so, TxDOT should negotiate a formal agreement between the two parties.
- It is further recommended that VTR should work with the Vehicle Inspection Division at DPS and TxTag to develop a strategy for a future common vehicle identifier.
- The study team recommends that MVD remain within TxDOT and not move to the Texas Department of Licensing and Regulation (TDLR). The audit team examined the functions of MVD against the overall strategic consumer service

functions of TxDOT and felt that there were solid reasons why MVD should remain with TxDOT. There are a number of operational elements within MVD that support significant synergies with other consumer service functions in VTR and MCD, especially if the 'umbrella' motor vehicle services recommendation is implemented.

- It is recommended that TxDOT move full responsibility for the administration of the Temporary Tag Program (the new Web-based temporary tag system and any underlying business processes related to the administration of the registration functions associated with the Temporary Tag Program) from MVD to VTR. This transition of responsibilities will allow TxDOT to most effectively implement the requirements of SB11 and SB1786.
- The study team recommends that TxDOT initiate discussions with DPS about the potential of moving salvage yard licensing from VTR to DPS. DPS is already responsible for investigating complaints against salvage yards. In addition, DPS licenses scrap metal dealers, many of whom also hold salvage dealer licenses. Whereas the licensing and enforcement functions for salvage yards are currently split across two agencies, this recommendation will achieve administrative efficiencies and economies of scale by combining the licensing and enforcement functions for salvage yards within one state agency.
- It is recommended that TxDOT initiate dialogue with the Comptroller of Public Accounts about the potential feasibility of moving the administration of the International Fuel Tax Agreement (IFTA) into the International Registration Plan (IRP) office in VTR, because these programs serve common customers. At the same time, responsibility for auditing both programs would be given to the Comptroller of Public Accounts. This would represent a shift in responsibility for the auditing of IRP from VTR to the Comptroller of Public Accounts.
- It is recommended that TxDOT initiate dialogue with DPS about moving responsibility for the disabled driver parking placard from VTR to Driver Licensing in DPS. As part of this recommendation, TxDOT would also eliminate its disabled plate program. This recommendation is based on the placard being more individual or driver dependent (based on medical history) than vehicle dependent. This recommendation would result in having only one identifier, a placard issued by driver licensing that is specific to the driver rather than the two identifier system (placard and plate) that is in use today, and would reduce the cost to the state of maintaining two functionally similar processes.
- It is recommended that the driver licensing program remain at DPS and not be shifted to TxDOT. Further analysis indicates that there are limited synergies with VTR registration and titling functions. In addition, with Driver Licensing dealing with major federal issues over identification programs (Real ID), the timing of any move at this time would be counterproductive.

G. Using Technology to Enhance Vehicle Titling and Registration

1. Study area scope

Last year, the Vehicle Titles and Registration (VTR) Division registered almost one million more vehicles than in the previous year. Statistics show more than 1,000 people a month move into Texas. The state's soaring population figures and subsequent influx of new vehicles requires VTR to rethink its business practices. It must use new technology and ideas to establish the most efficient method for meeting the demands of its expanding business. Likewise, it needs new technology to deliver the highest quality customer service.

However, VTR is limited in its ability to apply new technologies by a number of statutory requirements. This includes requirements for virtually all registration and title transactions to be processed through the county tax assessor-collectors (TACs) and the current fee structure for processing online transactions through the Department of Information Resources (DIR) Web portal.

In response to these challenges, this study area sought to identify potential opportunities for greater use of the Internet and other technologies for providing vehicle titling and registration functions. The study area also addressed the impact of any proposed changes on the county tax assessor-collectors who currently perform many of these functions and the potential changes in the revenue sharing model between TxDOT and its tax assessor partners that may be appropriate based on changes in service delivery mechanisms and the costs being incurred by each partner. Likewise, the study area included an assessment of the feasibility of having the tax assessors perform some additional transactions including those currently done in Vehicle Titling and Registration (VTR) regional offices to offset the potential loss of revenue from county transaction fees based on proposed changes in the revenue sharing model.

2. Summary of findings

The study team's primary findings in terms of the potential opportunities for greater user of technology for providing vehicle titling and registration services are as follows:

- The audit team found that overall VTR is a well managed organization that, over the last several years, has been struggling with an aging legacy system while advancements in technology offered new alternative delivery channels in which to better serve the division's customers.
- The Internet is the fastest growing service delivery channel for vehicle titles and registrations and a number of states are taking full advantage of this. For example, Arizona and Virginia's vehicle registration functions each have over 20

Internet service options available to their customers. These Web-based functions provide improved customer service to citizens and reduce the cost to the state of processing transactions.

- Likewise, Florida, North Carolina, Pennsylvania, South Carolina, and Virginia are among a number of states who offer online dealer titling and registration services, which allow dealers to submit transactions electronically, thus bypassing the county agents, third-party contractors or motor vehicle offices that would have otherwise had to process the transactions.
- Texas is lagging behind these states in utilizing Internet-based vehicle titling and registration services. VTR currently offers only three Internet-based services and one of these services is only available in some counties.

There are a number of reasons TxDOT is lagging behind other states in the use of the Internet. These include:

- Current statute requires the county tax assessor-collectors to process registration renewals, thus the current Internet-based application has been designed to route through county offices for processing.
- VTR relies heavily on county tax assessor-collectors for the delivery of vehicle titling and registration services; although much of the relationship between TxDOT and the counties are defined in statute, there is no contract or service level agreement between the two parties. This can leave some decisions, such as whether to allow the citizens of a county to be able to utilize certain Web-based or dealer specific services up to the county's elected tax assessor-collector and result in inconsistent service delivery across the state.
- Participation in the current Internet service is at the option of the county tax assessor-collector in each county. While most of the largest counties have chosen to participate, citizens in many rural counties do not currently have access to the Web-based registration renewal application.
- The fees that TxDOT are required by statute to pay to the Department of Information Resources (DIR) TxOnline portal are extremely high and consequently impact the return on investment from any proposed Internet applications.
- Customers are currently required to pay a 'convenience fee' to use the Internet application in order to make sure the state receives the same amount of net proceeds (less online and credit card processing fees) as the state would receive for a walk-up transaction. This stands in contrast with many other industries (for example airlines) where customers are actually charged a fee for not using the Internet to perform a transaction.
- Section 501.023 of the Transportation Code requires that title transactions involve tax assessor-collectors and does not allow VTR to have a direct

relationship with the dealers. This statutory limitation impacts the extent to which VTR can implement a dealer titling and registration application similar to those being utilized in other states.

- VTR has recognized the need for implementing more Internet-based applications and plans to do this to the extent it is permitted to do so by statute as part of its overall Vision 21 re-engineering initiative. However, this initiative is only in the formative stages and is expected to be a multi-phase, multi-year effort. At the same time, there are significant opportunities for substantial cost savings to the state in the near to intermediate term from the deployment of Web-based, self-service applications as front ends to the existing RTS system environment, with the applications designed to be ported to the future Vision 21 environment.
- The study team's efforts to develop a business model for the vehicle registration and titling work performed by county tax assessor-collectors suggests that many of the offices in the medium to smaller counties may not be making money processing these transactions for the state under the current fee structure. The current fees paid to the counties for processing VTR transactions have not been revised since 1991.
- The elimination of the commission paid to county offices on Internet-based transactions will have a significant return on investment for the state. This return on investment will be magnified as VTR's transaction volume grows as the state continues to see significant increases in the number of vehicles registered each year.
- Because the volume of work will be reduced, there will be a corresponding reduction in the amount of money paid to the counties for processing work they perform for VTR. In response, some counties should be able to reduce staffing levels as a result of the lower transaction volume. Likewise, it may be appropriate to slightly increase the fee for those non-Internet transactions which will actually be processed by the counties. Another strategy could be allowing the counties to perform additional types of transactions currently performed in VTR regional offices. The study team found that there may be some opportunities to have the counties perform additional types of transactions, but that these opportunities are limited.

3. Highlights of recommendations

Dye Management Group, Inc.'s recommendations concerning the use of the Internet and other technologies and the resultant steps required to address the impact of increased use of technology on the county tax assessor-collectors include the following:

- Dye Management Group, Inc. recommends that TxDOT seek statutory changes to enable VTR to implement a statewide Internet-based registration program which does not require any processing to be performed by county tax assessor-collectors.

- Dye Management Group, Inc. recommends that TxDOT seek statutory changes necessary to enable VTR to establish a direct relationship with the dealer community to implement an online dealer titling and registration program which does not require the involvement of county tax assessor-collectors.
- The study team recommends that TxDOT negotiate with the Department of Information Resources (DIR) and DIR's third-party partner for a reduction in the current fees. These fees do not reflect the potential volumes of transactions that could be processed nor are they consistent with the cost of similar statewide portals in other states. With the likelihood of VTR transaction volumes increasing by millions of transactions each year, establishing a lower fee structure based on volume is very appropriate. If reasonable fee reductions cannot be negotiated or are limited by current statutes, TxDOT should then request necessary statutory changes or a waiver from participation in the TxOnline program participation from the Texas Legislature during the next legislative session.
- Dye Management Group, Inc. recommends the elimination of the current convenience fees. VTR should encourage customers to use the Internet, rather than penalize them with additional fees in order to use the Internet. To accomplish this, TxDOT should work with legislators and legislative staff in order to seek the necessary changes in statute from the next session of the Texas Legislature.
- Based on these recommended statutory changes, Dye Management Group, Inc. then recommends that TxDOT implement priority Internet applications in the current RTS environment but with portability to the future V21 environment. These applications should be designed and implemented as 'plug-ins' to the current RTS environment but built in such a way so as to support portability to and compatibility with the next generation environment to be implemented through Vision 21. This will allow VTR to meet current legislative mandates in the case of temporary tags and begin to achieve improvements in customer service and the significant benefits and return on investment of Internet transaction processing, while continuing to design and implement the full Vision 21 environment. The applications which should be implemented on a priority basis are:
  - Web-based temporary tag application.
  - Internet-based application for registration renewal bypassing county offices.
  - Online dealer titling and registration.
  - Internet-based electronic lien and title application.
- Dye Management Group, Inc. recommends that TxDOT work with the county tax assessor-collectors to develop and implement a new revenue-sharing formula which compensates county assessors at a higher rate for the non-Internet

transactions which the county will still process, but no longer compensates them for processing Internet-based transactions.

- The study team recommends TxDOT work with the county tax assessor-collectors to define and implement a service level agreement between VTR and the county tax assessor-collectors. Such an agreement would supplement the relationship as it is identified in statute and would provide the day-to-day operational guidelines for interaction between VTR and its county partners. This service level agreement would include the commitment to provide services, monetary arrangements as identified through the revised revenue sharing model and other contract provisions.
- TxDOT should work with the county tax assessor-collectors to evaluate the feasibility of performing additional transactions in the county offices and implement those strategies deemed viable by VTR and its county partners. Examples of other services could include electronic liens and titles and some overdue fine collection.

H. Opportunities for Consolidation of Call Center Functions Currently Performed Across Various TxDOT Customer Facing Units

1. Study area scope

The objective of this study area was to assess the potential consolidation of some or all call center functions currently performed in individual business units. As part of this assessment, the study team identified and evaluated the requirements and risks associated with consolidating call centers. This study included analyzing several alternative approaches for providing call center functionality, including:

- Status quo model in which call center operations are operated independently by each of a number of TxDOT divisions.
- Modified status quo model, which envisioned cross-divisional coordination in planning call center processes and increased standardization of technologies department-wide.
- Virtual consolidation model, which included the process improvements and technology standardization under the modified status quo model, as well as further integration of existing call center functions through the application of technology. This included the implementation of a department-wide ‘Level 1’ call center.
- Full consolidation model, which envisioned the integration of some or all of the existing call center functions in each division into a single department-wide call center function.

- Outsourcing/privatization model, which involved the outsourcing of a consolidated call center function.

2. Summary of findings

The study team's findings in regards to the existing operations of the various call center functions within TxDOT and the potential for increased efficiencies in operating these call centers include the following:

- All call centers operate independently and utilize different vendors, equipment, software, features, policies, processes, and procedures.
- Divisions do not generally collaborate on best practices and process improvements.
- The volume of calls and contacts have been increasing relative to staffing levels and operating budgets, increasing the strain on the call center functions and impacting overall customer service levels.
- There is a multitude of agency phone numbers. While established and regular agency customers know how to reach the specific agency program staff members they need to contact in order to access services, first time and many individual customers do not have a one-stop entry point for 'Level 1' services.
- Customer accessibility to functional agency resources, such as phone numbers, basic information, agency web site information, etc., varies considerably.
- The various TxDOT divisions, which manage call centers, do not generally have regular/formal customer feedback processes such as customer surveys, customer/user advisory groups, etc.
- There is no consistent agency-wide performance management and measurement process for call center operations.
- There is no agency-wide coordinated plan, or significant division level plans, for individual call center disaster recovery.

3. Highlights of recommendations

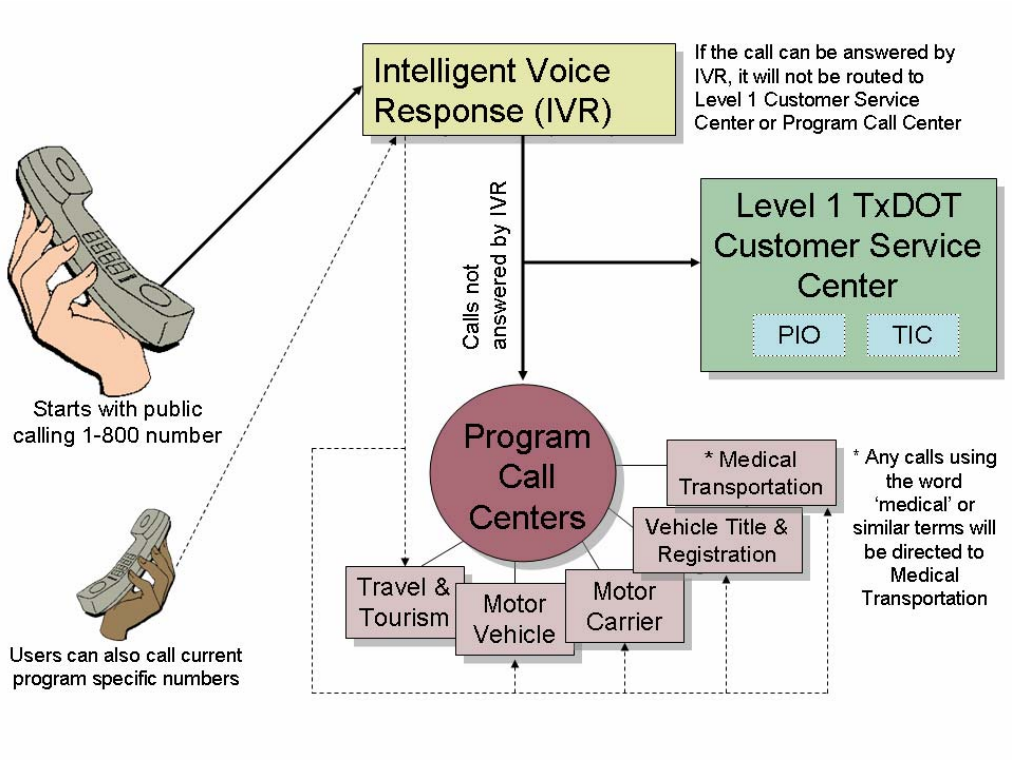
Dye Management Group, Inc.'s recommendations concerning potential improvements to improve the efficiency and effectiveness of the department's call centers include adopting most of the elements of the virtual call center model as follows:

- TxDOT should implement consolidated/coordinated planning and procurement for its call center functions. This includes:
  - Establishing a multi-division Call Center Planning Group to provide policy guidance and direction.

- Establishing TxDOT call center standards and a recommended call center architecture and migrating individual call centers to this standard architecture as upgrades are initiated.

- TxDOT should design and implement a consolidated and coordinated TxDOT call center number and portal. This virtual call center, which is illustrated in Exhibit ES-4, would have the following features:
  - A 1-800 number answered by an intelligent interactive voice response (IVR) capability, programmed to answer the most frequently asked questions about TxDOT in general and each of the TxDOT program areas.
  - Automated routing through the IVR to either a Level 1 customer service function or a specific program call center based on information provided by the caller.
  - Automatic and immediate routing to the medical transportation call centers of any call determined to potentially be related to medical transportation (to minimize impact on the stringent call answering requirements of the proposed *Frew* settlement).
  - A Level 1 call center or customer service function staffed through the existing Public Information Office (PIO) and Travel Information Centers (TIC), with calls rotating to the next available PIO or TIC staff member.
  - Direct program-specific phone numbers maintained for use by those customers who already have existing relationships with one or more program areas and know the specific area in TxDOT that they want to contact.

Exhibit ES-4: Proposed TxDOT Single Customer Voice Portal Solution



- TxDOT should implement customer advisory groups and feedback processes for call centers in all divisions.
- TxDOT should implement agency-wide and division-specific performance measures as appropriate and report on these measures on a monthly/quarterly basis.
- TxDOT should continue the ongoing effort to strengthen its web site to improve the customer's ability to easily access key information, thus potentially reducing the number of general information calls received. This should be accomplished by assuring information is readily displayed on TxDOT's newly designed web site, including incorporating basic program information, developing frequently asked question (FAQ) sections, and ensuring that all links on web sites are functional.
- TxDOT should establish disaster recovery plans for each program call center. The exact strategies may differ between individual program areas, depending on the specific business criticality of each function.

I. Additional Revenue Opportunities and Potential Alternatives for Organizational Re-alignment within the Travel and Tourism Functions

1. Study area scope

This study area specifically involved a detailed assessment of the department's travel publications and the operations of Travel Information Centers (TICs) and Safety Rest Areas (SRAs) in order to determine how these program areas contribute to the strategic objectives of TxDOT. Our assessment included which potential strategies might be applied to assure that Fund 6 priorities are being advanced and to determine if revenue potentials are being maximized.

2. Summary of findings

Our study team's findings regarding the strategic fit of the travel and tourism programs within TxDOT and the opportunity for additional revenue from these programs include the following:

- The travel and tourism programs within TxDOT generally appear to be efficiently and effectively managed based on:
  - TIC and SRA management being innovative and attentive to the needs of motorists resulting in high public satisfaction with both the TIC counselors and the renovated SRAs.
  - TxDOT's net investment of approximately $7.6 million dollars in travel publications and Travel Information Centers provides an estimated revenue of $24 million-plus in terms of fuel tax to Fund 6. This figure does not include additional sales tax or other revenue for the state, cities, or counties that may be generated as a result of visitors spending additional time in the state because of information provided by TxDOT's travel programs. Likewise, it does not include other tangible or intangible benefits such as accident avoidance through tired drivers stopping at safety rest areas.
  - TxDOT has generally been very proactive and innovative in terms of enhancing services to citizens, identifying new revenue opportunities, and/or identifying opportunities to improve the cost-effectiveness of program delivery through targeted outsourcing of non-core business functions.
  - The emphasis placed on attractions and events in smaller towns by TxDOT's tourism program has expanded tourism opportunities for smaller Texas communities, thus increasing total miles traveled by visitors within

the state, promoting economic development in rural areas and helping to extend the length of visits.

- This success story in regards to TxDOT's travel and tourism programs, however, is not as well known to policy-makers and other stakeholders as it could be. A stronger communications strategy is needed to inform a wide range of policy-makers and other stakeholders about these customer satisfaction and revenue generation outcomes.
- Clear synergies exist between the tourism programs and the strategic goals of TxDOT through extending the length of stays and helping to create positive visitor experiences. The department's tourism programs at a minimum play a role in meeting TxDOT's strategic objectives to reduce congestion, enhance safety, and expand economic opportunity.
- The interagency MOU that coordinates the delivery of state tourism programs succeeds in achieving separation of functions and agency focus while coordinating tourism efforts statewide. At the same time, there is no clear alternative location at this time for TxDOT's tourism-related functions within Texas' state government.
- A number of existing TxDOT travel and tourism programs generate revenue. For example, *The Texas Accommodations Guide* is self-sustaining, and *Texas Highways* magazine and *The Texas Events Calendar* are almost self-sustaining. There are, however, additional revenue opportunities that TxDOT should continue to pursue, including updating the administrative code provisions regarding appropriate advertising in travel publications in order to allow for the potential for new types of advertising in department publications. Continued evaluation of revenue generation opportunities that may be appropriate at the 27 safety rest areas not located on the interstate highways and the sale of banner ads on the TexTreks web site that is available via wireless Internet access at TICs and SRAs.
- The new federal Interstate Oasis Program presents limited revenue opportunities for TxDOT, with the primary revenue potential likely to be fees for signing establishments as an oasis. It is not foreseen that TxDOT itself would be an operator of oases.
- TxDOT is currently limited by statute in its ability to provide travel centers and other traveler services as part of the design of the proposed new toll roads being developed throughout the state. This represents both a potential customer service issue and a lost revenue opportunity for TxDOT that could help to fund the department's travel and tourism programs.
- Outsourcing the management of rack space in TICs and possibly expanding rack space to some SRAs could reduce the burden on travel counselors at the TICs, while at the same time providing for wider distribution of travel information through safety rest areas. However, it would not likely constitute a revenue

opportunity for TxDOT, and there are significant stakeholder concerns on a number of fronts about the viability of this initiative.

- There are some opportunities for greater synergy and efficiencies between the Travel Division and Maintenance Division. This includes having the advertising sales firm already under contract to TxDOT sell the banner advertising on TexTreks versus the Maintenance Division separately procuring a contractor to sell advertising. Likewise, there would be economies of scale in consolidating the contracting processes for facilities management and maintenance, which are currently contracted for independently by the Maintenance Division for SRAs and the Travel Division for TICs.

3. Highlights of recommendations

Dye Management Group, Inc.'s recommendations concerning the strategic fit of the travel and tourism programs within TxDOT and the opportunity for additional revenue from these programs include:

- It is recommended that the travel and tourism programs should remain housed within TxDOT.
- The study team recommends that TxDOT regularly conduct formal return on investment (ROI) studies for Travel Division publications and services and proactively communicate the results of these studies to stakeholders.
- The department should continue exploration of potential commercial activities at SRAs not located on the interstate.
- TxDOT should utilize the Travel Division's existing advertising sales channels to market the sale of banner ads for the TexTreks web site, thus better leveraging other existing advertising sales activities for the department's travel publications. Likewise, TxDOT should also explore opportunities for obtaining passive revenue through the TexTreks web site and/or existing SRA kiosks.
- TxDOT should initiate use of banner advertising and digital subscriptions for *Texas Highways*. Likewise, *Texas Highways* magazine should use its content and photography to market additional products and services through its web site.
- TxDOT should complete its review of the administrative code restrictions on expanding ancillary product categories for *Texas Highways* Magazine. Likewise, TxDOT should continue to regularly review subscription and advertising rates for Travel Division publications to match market conditions.
- The department should conduct a feasibility study to evaluate the potential for using an outside vendor to manage and replenish brochure racks at the TICs, with a possible expansion to SRAs. Representatives of all of the impacted stakeholders should be invited to participate in this feasibility study to ensure that the various issues with this delivery approach are fully vetted.

- TxDOT should develop a departmental strategy related to traveler services to be provided on toll road facilities and to allocate revenue resulting from these services to potentially support existing travel and tourism programs, thus reducing the investment required from Fund 6 to support these programs. This study should include customer surveys and be conducted with extensive travel industry involvement. TxDOT should then seek statutory changes during the next legislative session as appropriate to allow for implementation of the proposed strategy/plan.
- TxDOT should consolidate the contracting process for facilities management and maintenance services for the TICs and SRAs.

J. Consolidation of Grants Management Functions, Including Potential Shifting of Some Responsibilities to Grantees through Increased Use of Self-Certification

1. Study area scope

TxDOT operates grant or grant-like programs in the areas of public transportation, traffic safety, auto theft prevention, and transportation enhancements. These programs are managed by four different TxDOT divisions. The objective of this study area was to assess the potential for greater operational efficiencies and other synergies in managing the department's various grant or grant-like programs.

This study area included analyzing the feasibility of managing the public transportation and traffic safety grant programs through the establishment of a common contracts/grants management function across grant programs at the district level or managing these programs on a regional basis. The study area was also designed to analyze the potential to privatize all or part of this contracts management function.

In addition, this study area also evaluated the potential for shared processes/procedures and training across TxDOT's various programs and the applicability of shared technology to manage these programs. Finally, the study area investigated the potential for increased self-certification by grantees, including the extent to which this may be allowed under the rules of various federal partners.

2. Summary of findings

Dye Management Group, Inc.'s key findings in this study area include the following:

- Traffic Safety and Public Transportation grant programs have been experiencing growth (in terms of dollar amount of grants and number of projects/grantees managed) relative to staffing levels and operating budgets.

- Grant programs operate autonomously in each division and are therefore missing opportunities to share best practices, address issues of common interest, and ensure consistency.
- There is inconsistency in the use of position descriptions for assigning district office staff, which can result in staff members not fully understanding or being qualified to perform grant management oversight functions.
- TxDOT has made improvements in the training of staff but could do more to improve the productivity and effectiveness of its staff, particularly in district offices.
- TxDOT currently has a pilot program in Traffic Operations to develop and implement a third-party eGrants system that will support the entire grants management lifecycle. The eGrants initiative is expected to improve the efficiency and effectiveness of the grants management process for both TxDOT and grantees. It will provide electronic support and automation of the solicitation/call for proposals, submission, review/scoring, awarding/contracting, and reimbursement, performance reporting, and monitoring of grants. Based on the results of the pilot, it is intended that this eGrants initiative can be expanded to other areas such as Public Transportation and the Automobile Theft Prevention Authority.
- Transportation enhancement projects have very lengthy project life cycles, which complicates the administration and oversight of these projects and management of the overall program.

3. Highlights of recommendations

Dye Management Group, Inc's proposed recommendations for improving the overall efficiency and effectiveness of the management of TxDOT's various grants programs include the following:

- The audit team recommends that TxDOT maintain its current district-based structure for managing the oversight of public transportation and traffic safety grants and the enhancement program.
- The audit team recommends that TxDOT create a 'Grants Management Coordination Team' to standardize and coordinate grant management processes across program areas.
- It is recommended that TxDOT establish a set of common grants management processes and associated outcome measures for implementation across program areas.
- The audit team recommends that TxDOT implement the eGrants system and processes for the public transportation and auto theft prevention grants programs. The eGrants system should not be implemented for the enhancement program. However, the applicability of the eGrants application to the enhancement

program should be re-assessed if new calls for projects are initiated for this program.

- The audit team recommends that the department establish standard 'grants management' position criteria for use in selecting and assigning district office staff.
- It is recommended that TxDOT continue to make improvements to its training efforts, especially of district office staff. As part of this effort, the audit team recommends that TxDOT work toward obtaining certifications for its grants management staff as the National Grants Management Association Body of Knowledge and its associated professional certification program matures.
- The audit team recommends that the department utilize self-certification techniques and privatization of monitoring and oversight activities in selective low-risk areas such as inspection of inventories and equipment to build grantee management capacity and to allow agency staff to focus monitoring efforts in high-risk areas.
- It is recommended that TxDOT work with enhancement program recipients to establish reasonable start and completion timeframes for projects as part of the contract agreement process.

K. Assessment of the Impact of Recent Operational Changes in the Medical Transportation Program and Identification of any Actions Required to Improve Coordination with HHSC and Prepare for Anticipated Program Growth

1. Study area scope

TxDOT's Medical Transportation program (MTP) is responsible for providing transportation to Medicaid clients who have no other transportation available to access health care services, as well as participants in the Children with Special Health Care Needs and Transportation for Indigent Cancer Patients programs. This study area involved an evaluation of the impact of recent operational changes in the medical transportation program on client service levels and program cost-effectiveness and efficiencies. It also included the development of estimates of program growth over the next five years and the identification of potential challenges resulting from this program growth and possible strategies to address these challenges.

Note: Since this study area was initiated, legislation has been passed transferring responsibility for the administration of the Medical Transportation Program from TxDOT to HHSC. Per SB10, which is effective on September 1, 2007, the medical transportation program will return to HHSC by September 1, 2008. The audit team believes, however, that most of our suggested recommendations are still applicable to the ongoing operations of MTP at HHSC and we would suggest that the findings and

recommendations in this study area can be a valuable resource to HHSC staff in terms of planning for and executing the transition of the program.

2. Summary of findings

Dye Management Group, Inc.'s key findings in this study area included the following:

- The division of governance and operational responsibilities between the Health and Human Service Commission (HHSC) and the Texas MTP at TxDOT under the existing arrangements prior to the adoption of SB10 present both policy and operational coordination challenges for both organizations.
- Feedback from transportation providers and client representatives regarding TxDOT's performance in operating MTP are primarily positive.
- Improvements to and clarification of the transportation provider contracting process from RFP issuance to post contract award is needed.
- A number of call center performance challenges have been identified and are being addressed by TxDOT.
- There is no clearly understood, comprehensive objective system in place for recording and documenting the resolution of issues that arise with clients, providers, and staff.
- A number of factors are likely to contribute to program growth and increased costs. This includes program forecasts conducted by HHSC that anticipate an increase in Medicaid caseload and an associated increase in MTP program expenditures. The impact of the federal government reimbursing Texas at the administrative rate rather than the higher Federal Medical Assistance Percentage (FMAP) rate and the impact of current litigation settlements as it relates to tighter program standards for all Medicaid recipients age 21 and under. Likewise, there will likely be other operational impacts for all recipients because of the results of this litigation and the increased use of the program as a result of outreach efforts required by the settlement.

3. Highlights of recommendations

Dye Management Group, Inc.'s recommendations for improving the overall efficiency and effectiveness of the medical transportation program include the following:

- The state should consider revisiting SB10 provisions prohibiting TxDOT from acting as the MTP broker for the state during the next legislative session. Considerable opportunity exists for the state to leverage the program and transportation expertise available at TxDOT. TxDOT's contracting and operational strengths also make it an ideal partner for the Medicaid program in delivering transportation services to eligible clients. Likewise, the infrastructure

and efficiencies that TxDOT has begun to gain for the program should be continued.

- MTP should adjust program operations to address a number of operational issues identified in the interviews and stakeholder meetings including:
  - Establishing a process for evaluating current policies (i.e., the requirement that a client have no more than a 90-second hold time before they are able to talk to an intake worker) on the quality of call center services.
  - Developing protocols for the appropriate escalation of call center calls to handle exceptions; likewise, more training and tools for call center staff to provide consistency in the information given to clients.
  - Implementing and then educating providers on a formal and automated issue resolution process that tracks all issues consistently until resolved.
- HHSC, in conjunction with and support from TxDOT, should use this audit as an opportunity to clarify policy issues pending or on hold during the Frew litigation that could improve operational efficiency and processes.
- Working with HHSC, TxDOT should assist in resolving the federal reimbursement disallowance issue using options available under federal waiver or through the Deficit Reduction Act (DRA) so that the maximum federal reimbursement can be reinstated.
- MTP should develop more realistic funding projections that take into account the cost drivers indicated in the study findings that are identified in this audit.
- MTP should continue evaluation of different service delivery models and reimbursement models that could possibly be implemented for various geographic locations. As part of this evaluation, MTP should implement a pilot of a capacitated broker model in at least one large, urban county.
- MTP should consider opportunities for implementing readily available and affordable technology such as smart cards, swipe cards, and GPS, including potentially the application of a number of these various technologies as part of the recommended pilot. MTP staff has proposed the use of some of these technologies in the past and have encountered some Medicaid policy or statutory limitations. As an example, MTP has been advised that they must get a client's actual signature on a log book versus using a swipe card. Thus, it may be necessary to work with HHSC, the federal Centers for Medicare, Medicaid Services (CMS) and/or the Texas Legislature in some cases to adjust policies and/or statutes to facilitate greater use of these technologies. Use of these technologies can provide a significant return on investment in terms of improving the overall efficiency and effectiveness of the operation of MTP.

L. Opportunities for Improving the Overall Efficiency and Effectiveness of the Outdoor Advertising Control Function

1. Study area scope

TxDOT's Right of Way Division is responsible for implementing the Outdoor Advertising Control Program (OACP). This study area involved a detailed look at the activities of the Right of Way Division as it relates to the Outdoor Advertising Control Program and the field support services provided in the district offices that administer the OACP. In particular, the study team evaluated the revenue generated and operating costs incurred to implement the regulatory requirements relating to the outdoor advertising industry. Based on this analysis, the team identified a number of issues and opportunities with the current OACP and developed a number of recommendations, which could improve the overall efficiency and effectiveness of TxDOT's OACP and help to allow the program to operate on a revenue-neutral basis.

2. Summary of findings

Dye Management Group, Inc.'s key findings concerning the outdoor advertising control function include the following:

- TxDOT's outdoor advertising control program has a number of challenges created by the following factors:
  - The size of the state and the amount of road mileage subject to control is considerably larger than other peer states.
  - The number of district offices and the prevalence of part time OACP positions in the districts.
  - The number of certified cities, some administering their own program.
  - The need to operate dual programs in the federal Highway Beautification Act (HBA) program and the state's own rural roads program, which have similar objectives but different rules.
- TxDOT's OACP is not currently revenue-neutral. In FY 2007, the OACP is estimated to have a deficit of approximately $492,000. At the current operational approach and fee structure, this deficit position will continue to get larger, reaching approximately $795,000 in FY 2012.
- TxDOT's OACP has a number of operational inefficiencies resulting from:
  - Distribution of program functions across headquarters and the districts.
  - Lack of consistency in processing permit applications and renewals between districts.

- Limited use of automation.
- Use of monthly renewal cycles.
- No established statewide standards for mapping and identifying roads subject to control.
- Lack of up-to-date statewide sign inventories; some districts have not updated their inventories since before 2000.
- No standardized equipment for locating and measuring signs to support consistency in field activities.

- The current license fee structure lacks equity. There is a similar license fee for an organization that owns one or two signs advertising its own business and an outdoor advertising firm with hundreds of signs across the state.
- The current permit fee structure also lacks equity and is not consistent with national best practices. TxDOT's current permitting fees are fixed and based on a single site whereas best practices findings would indicate that square footage of the sign, number of faces, and the applicable control system should be taken into account when assessing outdoor advertising permit fees.
- Programmatic information is not shared via the Internet with the regulated industry or the public as is considered to be a best practice.

3. Highlights of recommendations

The study team's recommendations for improving the operational effectiveness and efficiency of the outdoor advertising control function include the following:

- TxDOT should update as soon as possible the statewide inventory of permitted signs using standardized equipment to record GPS location, size lighting and spacing, and digital imaging. An updated inventory is an essential building block for addressing most if not all of the identified issues and many of the other recommendations. One approach could be to finish the planned inventory pilot of five districts and integrate the lessons learned into a statewide effort. The audit team feels that the cost to delay completion of the statewide inventory outweighs the benefits of doing the pilot first. In addition, the pilot vehicle in place was written so that it could be expanded, at state option, to the entire state without being re-bid. To this end, we strongly recommend that TxDOT not wait for completion of the pilot effort but instead move forward with a statewide inventory effort now, either by expanding the pilot or through a separate statewide procurement.
- TxDOT should centralize the existing permitting process. This would include establishing a centralized mail drop, defining a protocol for identifying the order of submissions, and setting standards for application review to provide a five-day notice on acceptability and approvals within 30 days.

- The department should develop a centralized field review function to evaluate permit applications, sign erections, and evaluation of identified problems. This work would be performed by a small internal team reporting to the Right of Way Division and deployed regionally. This would take the place of the work currently being performed by resources in each district. The study team determined that a centralized in-house approach in which staff are deployed regionally would improve consistency and would be more cost-effective in terms of implementing new GPS-based technology for performing inspections given that new equipment would not need to be purchased and training provided in each district. This centrally managed function would take the place of the 19.45 FTEs in the districts currently supporting the outdoor advertising program. This eight person team would be established by redirecting a part of the 11 positions in various districts which are currently dedicated on a full-time basis to the outdoor advertising program.
- TxDOT should centralize and automate the billing process for all renewals. It should also provide for annual set-date billings and allow for multi-year renewals at the option of the industry.
- TxDOT should seek statutory revision to either eliminate or revise the current license requirements. At a minimum, TxDOT should seek the repeal of the surety bond requirements that have not been utilized to date by the department to revoke a permit or license. In the interim, TxDOT should by rule adopt a graduated scale for licenses based on the number of counties and the size of the licensee's sign inventory.
- TxDOT should modify its permit fee schedule based on the updated inventory data and license fee status to move toward a revenue-neutral program. In doing so, the department should consider a fee structure which accounts for variation in sign installation and allows for and includes a fee for sign modifications. While this will increase the complexity of fees for both TxDOT and sign owners, a comprehensive current inventory should minimize the administrative aspect of this approach. Not using a graduated fee structure for permit renewals does not reflect best practices found in other states and unfairly penalizes the smaller sign owners in the state.
- TxDOT should provide Internet-based access to OACP information including sign inventory data and self-service-capabilities such as application tracking and online invoicing and payment processing for the industry. Likewise, TxDOT should incorporate an OACP layer in the TxDOT GIS to cover control routes and sign locations.

By implementing these recommendations, the audit team estimates that the program will move from its current annual deficit position to an annual surplus of approximately $214,000 by FY 2010; reducing the overall anticipated cumulative deficit by $2,350,000. Over the five year period, the program would have an anticipated cumulative deficit of $4,024,871 under the proposed operating model versus a cumulative deficit of $3,826,911 under the status quo operating model. The

primary reason for the larger cumulative deficit under the revised operating model is the result of the one-time investments in completing the initial statewide inventory, automating the billing system; Web-enabling the OACP data; providing self-service capabilities for the industry and providing new equipment and training for the internal regionalized review team. These one-time capital costs are approximately $2,610,000.

M. Potential Strategies for Reducing the Elapsed Time Required to Complete Motor Vehicle Enforcement Investigations

1. Study area scope

The Motor Vehicle Division (MVD) of TxDOT is responsible for licensing all franchised motor vehicle dealers, used vehicle dealers, new motor vehicle manufacturers, distributors, converters, dealer representatives, lease facilitators and lessors, towable recreational dealers, and manufacturers. This study area involved analyzing potential strategies for reducing the elapsed time required to complete motor vehicle enforcement investigations. It included a detailed assessment and evaluation of various alternatives for improving case throughput and the overall efficiency and effectiveness of the MVD enforcement function. In addition, the recommendations from this study area were also assessed for potential application to the enforcement functions in the Motor Carrier Division (MCD).

2. Summary of Findings

Dye Management Group, Inc.'s key findings under this study area include the following:

- There is a significant deficiency in MVD investigations unit staff resources that prevent the division from providing proactive services to their clients and stakeholders. Indicative of this deficiency are the long delays in investigating and closing complaint cases as well as not requiring sufficient staff to perform pre-license inspections of independent motor vehicle dealership premises at locations throughout the state
- The current ratio of investigators to licensees prevents the MVD Enforcement Section from effectively managing caseload volumes. MVD currently manages 16,318 licensees and the Enforcement Section has a staff of 14 investigators. The licensee-to-investigator ratio is currently at 1,166 dealers per investigator. The average ratio for the next six largest states surveyed by the audit team combined is 216 licensees per investigator. This high investigator-to-dealer ratio leads to large caseload backlogs and a very high aging of cases in comparison to peer states.

- The centralized structure of MVD's investigation staff limits the depth of coverage available across the state and reduces the flexibility to respond to complaints in a timely manner.
- MVD faces challenges in protecting the licensing integrity of properly licensed dealers because it lacks the authority to effectively enforce dealer licensing regulations against unlicensed dealers. MVD has the authority to pursue violations by licensees. However, there is no specific statutory authority granted to MVD to pursue a violator that is not licensed.
- MVD investigators often find themselves in situations that have the potential for personal risk to the employee. In addition, licensees perceive that the investigators lack the legal 'police power' authority to require compliance with rules and regulations governing their operations.
- The Advertising Cure Letter legislation prevents MVD from effectively enforcing deceptive advertising laws. Present language enables the licensee to potentially violate two separate provisions of the law each month during a 12-month period and only receive a cure letter as a warning.
- Texas is the only state of the top ten jurisdictions with a large dealer population that does not pre-inspect licensee applicants. MVD believes that pre-license inspection may reduce the number of complaints about individuals who obtain a license for purposes other than engaging in the vehicle sales business at a permanent location. However, MVD has not had sufficient staff resources necessary to conduct inspections and recent efforts to outsource this function through an Invitation to Bid (ITB) resulted in a limited response from the vendor community.
- There is no completed system design for the external phase of the Licensing, Administration, Consumer Affairs, and Enforcement system (LACE), which is currently targeted to go live in February 2008. In addition, there are some concerns by stakeholders about the functionality and capability of the initial phase of LACE which has just been deployed.
- Our work in this study area exposed for the audit team that FTE justifications and allocations for MVD and other divisions are not typically prepared at the division level based on how these FTE allocations link to a division's ability to meet their customers' service-level expectations.

3. Key recommendations

Dye Management Group, Inc's recommendations concerning potential strategies to strengthen the efficiency and effectiveness of the MVD investigations function include the following:

- The audit team recommends that MVD increase the case closure rate and begin to reduce the caseload backlog by enlarging and regionalizing the investigations staff. This would involve:

- Increasing the size of the investigations staff by 19 investigators, along with companion increases in supervisory investigators, attorney, and staff support for a total of 28 new positions.
- Realigning the current staff and the proposed new staff into three regional investigative units who are deployed across the state to provide for more extensive geographic coverage.
- Conducting a formal internal review of the organizational performance (i.e., case closure rate, case backlog and case aging, etc.) of the Enforcement Section in two years to assess any additional investment needs in this area. This time period would allow for the internal components of LACE to be fully operational and the new staff and regional organization to have begun to be institutionalized.

- The audit team recommends that TxDOT network with a number of additional groups in order to expand the pre-inspection licensing services invitation list to attract a larger number of eligible responses to future Invitations to Bid (ITB). As an example, we believe that MVD should discuss its needs with the various police officer and firemen associations in Texas to identify potential candidates that may be interested in providing pre-license inspection services.
- The audit team recommends that TxDOT pursue statewide legislation that increases the penalties for unlicensed vehicle sales, known as curbstoning, and provides statutory ability to allow MVD or other law enforcement officers to authorize removal of vehicles which are being curbstoned by an authorized towing entity.
- The audit team recommends that TxDOT request the statutory authority to commission some MVD investigators as commissioned peace officers. The audit team believes that the commissioning of some MVD staff as commissioned peace officers is essential because it will increase the overall efficiency of the investigative process by providing clear authority for investigators to gather and request information, reduce the reliance on local law enforcement staff for initiating necessary enforcement actions, and improve the efficiency and effectiveness of the response to complaints by dealers and the public through a timelier resolution of cases. It can also help to provide an increased level of personal safety for investigators.
- The audit team suggests that MVD also establish formal partnerships with law enforcement agencies in areas with the highest incidence of enforcement activities and utilize this as a model for rollout across the state.
- The audit team recommends that TxDOT seek repeal of Section 2301.203(c) of the Occupations Code and Rule 8.271 Title 43; Chapter 8; Subchapter H of the Texas Administrative Code to remove the advertising enforcement limitations these statutes currently impose on MVD.

- The audit team recommends that TxDOT focus on institutionalizing the internal phase of the new LACE application; then beginning in late 2007, re-scope, re-plan, and revalidate the proposed external phase of the LACE initiative. This strategy will ensure that the current release of the LACE software is fully functional and meeting the needs of MVD staff before taking on the additional risk and complexity of new non-TxDOT users of the system.
- The audit team recommends that TxDOT design, develop, and implement a business planning methodology department-wide. This process should actively involve the customers of each function to help establish target service levels and provide for modeling of the impact of different resourcing and other investment decisions on these target service levels. It should also provide a mechanism for measuring the actual outcomes annually and a feedback process back into the annual planning process to adjust as appropriate the target service levels and resulting resourcing recommendations.

In terms of synergies between the MVD and MCD enforcement programs, we determined that the regionalized model for investigators currently used by MCD would be appropriate for MVD and have recommended the implementation of this model. We also assessed the applicability of our recommendation of instating some MVD investigators as peace officers to MCD's enforcement function. Discussions with MCD staff suggested that there are not currently the same issues related to licensee resistance to an MCD investigator's authority or concerns about the personal safety of investigators that are present within MVD. In addition, there were a number of good discussions between the MVD and MCD investigative staff participating on our stakeholder team. We believe TxDOT should establish a medium for continued dialogue and information sharing between the two investigative units. Likewise, while both units have independently addressed their current management systems and technology needs, we would encourage continued discussion between the divisions in the future, and efforts should be made to develop technology solutions that can meet the needs of both units where appropriate.

N. Summary of Multi-Program Recommendations

The focus of the consumer services audit was to identify high and medium risks associated with the six consumer service areas in order to identify the areas where mitigation action was necessary. While some risks were very specific to individual functions and/or operations, there were a number of risks that were consistently identified across many of the functional areas studied. These common risk areas are summarized in the following multi-program recommendations.

1. Dependence on technology to implement critical business change

There are three major technology implementations either underway or in planning and development within TxDOT. The Motor Carrier Division (MCD) is in the process of securing a vendor to develop their Texas Permit Routing Optimization System

(TxPROS). The Motor Vehicle Division (MVD) implemented the initial phase of their Licensing, Administration, Consumer Affairs, and Enforcement (LACE) system on May 1, 2007. The Vehicle Title and Registration Division (VTR) is beginning to develop their early conceptualization and business case scope for a new system (Vision 21) to replace their aging legacy registration and title system.

Of the three major system implementations, the audit team felt that the TxPROS initiative best reflected the exceptional management and staff efforts needed to implement a project that embraced the highest standards of best practices. Dye Management Group, Inc. also felt that the broad depth of experience within MCD's management and staff reduced the overall risk of this implementation. There were, however, elements of risk within each of the technology initiatives that require additional research and analysis to further mitigate the inherent risks of projects of their size and complexity.

2. Implementation of ongoing user /planning groups

Consolidated and coordinated planning and procurement offers TxDOT an opportunity to future reduce capital outlays and operating expenses, improve staff productivity and customer service levels, and/or partially absorb future workload increases. A common theme expressed in stakeholder group meetings throughout all of the audit's study areas was that the exchange of program successes and best practices was a key benefit of those group meetings. Dye Management Group, Inc. recommends that TxDOT encourage more discussion, plan jointly between the divisions in the future, make efforts to develop technology, and process solutions that can meet the needs of multiple functional consumer service units.

3. Business planning methodology

TxDOT should implement a business planning methodology that provides for an annual business planning process. This process specifically links investment and resourcing decisions such as the number of FTEs, contract dollars, and technology investment with target service levels based on measurable outcomes. The business planning process should provide for modeling of the impact of different resourcing and other investment decisions on the target service levels. It should also provide a mechanism for measuring the outcomes annually and a feedback process back into the annual planning process to adjust as appropriate the target service levels and recommendations. The three motor vehicle service divisions within TxDOT operate largely as independent agencies, rather than as a cohesive group. While their day-to-day operations have limited linkages to other divisions, there are advantages in working together in strategic development and business-planning activities.

O. Impact of Recommendations on FTE Allocations

Each of the study area assessments examined the present allocation of full-time equated (FTE) positions assigned to each functional area and the audit team evaluated whether the current FTE allocations were sufficient to conduct the tasks and assignments required by each division. The FTE impact of the team's recommendations is outlined below for those study areas where there is a projected impact.

- **Evaluation of potential strategies for improving turnaround time for oversize/overweight permits**
  - No additional permanent FTEs are recommended, although the findings support engaging temporary employees to support a single application queue until the TxPROS project is fully implemented and institutionalized. A minimum of 15 to 22 FTEs can be re-assigned to other areas requiring additional staff once TxPROS has been fully implemented. Depending on the productivity gains from the application of additional technology, it may be appropriate to apply some of these FTEs to the MCD investigatory functions.
- **Opportunities for greater synergies between vehicle registration, other motor vehicle functions within TxDOT, and the driver licensing function in the Department of Public Safety**
  - One additional FTE recommended staffing the proposed Assistant Executive Director of Motor Vehicle Services.
- **Using technology to enhance vehicle titling and registration**
  - No additional FTE recommended. There is a potential for significant FTE reduction (not estimated in detailed) in VTR with the implementation of the electronic lien and titling function.
- **Opportunities for improving the overall efficiency and effectiveness of the outdoor advertising control function**
  - Eleven new positions overall including the proposed headquarters managed permit review function (8 FTEs) and the new centralized billing function (3 FTEs) is offset by the potential to redirect at least 11 positions in the districts that are currently dedicated to outdoor advertising control activities.
- **Potential strategies for reducing the elapsed time required to complete motor vehicle enforcement investigations**
  - Twenty-eight additional FTE are recommended, including investigators, supervisory investigators, attorneys, and staff support.

I. Introduction and Project Overview

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This document presents a summary of the findings and recommendations of the performance audit of the consumer services auditable unit. This audit of the consumer services auditable unit is part of a comprehensive performance audit of the Texas Department of Transportation (TxDOT). The introductory section of this report provides background on the overall performance audit, the initial risk analysis that was performed to identify areas for additional investigation, and the scope of the areas defined for more in-depth study. The remaining sections then discuss the specific scope and approach and present the key findings and recommendations for each of the nine study areas.

A. Audit Background and Objectives

The Texas Transportation Code, Title 6, Chapter 201.109(b) (5) requires an independent performance audit of TxDOT management and business operations be completed as part of the initiation of the agency's upcoming sunset process. The Texas Transportation Commission, in conjunction with TxDOT senior management, decided to conduct this performance audit by dividing the department into five discrete auditable units. These auditable units are:

- Transportation funding.
- Contracting and project delivery.
- Consumer services.
- Management and support functions.
- Field operations.

TxDOT has retained separate audit teams to conduct the performance audits of each of these units. TxDOT has retained Dye Management Group, Inc. to perform the independent audit for the consumer services auditable unit. This report documents the findings and recommendations of the performance audit for the consumer services auditable unit.

TxDOT's overall objectives across the five performance audits are to:

1. Improve the quality of statewide transportation services by providing counsel on improved techniques to manage resources.
2. Identify opportunities for enhancing revenue to maximize financial resources available.
3. Develop strategies to remove operational barriers and improve the efficiency and effectiveness of operations.
4. Highlight exemplary and innovative practices, both internal and external, to TxDOT.

5. Provide a conclusion relevant to the audit objectives and recommend opportunities for reducing risks and improving operations.

To provide guidance and direction to the audit teams in meeting these audit objectives, TxDOT has established an Audit Oversight Committee (AOC). The role of the AOC is to provide overall direction to the performance audits. The members of the AOC are:

- Mr. Steven E. Simmons, P.E., Chairperson.
- Mr. Coby Chase.
- Mr. Bill Hale, P.E.
- Mr. Mario Jorge, P.E.
- Mr. Owen Whitworth, CPA CIA.

B. Scope of Consumer Services Auditable Unit

The overall focus of the consumer services performance audit is to conduct a review, analysis, and evaluation of those activities, tools, and procedures used by TxDOT for providing services that affect individual members of the traveling public or businesses responsible for transporting people and goods. The scope of the consumer services performance audit includes the following areas:

- **Motor carrier operations.** This function includes oversize/overweight permitting operations, inter- and intrastate motor carrier registration (including tow truck operators, passenger bus operators, and household goods movers), licensing of vehicle storage facilities, and the management of the statutorily required consumer protection program.
- **Motor vehicle dealer/distributor operations.** This function includes licensing of vehicle dealers, manufacturers, and distributors as well as administration of the Texas Lemon Law.
- **Grant programs.** This function includes the administration of a number of grant programs that are managed across several TxDOT units, including public transportation grants, the medical transportation program, the transportation enhancement program, traffic safety grants, and automobile theft prevention grants.
- **Vehicle title and registration operations.** This function includes the registration of motor vehicles including interstate trucking, vehicle titles, and vehicle license plates.
- **Revenue-neutral operations.** The primary emphasis in this function is the outdoor advertising program.
- **Travel operations.** This function includes a number of programs across several different TxDOT divisions, including the travel information centers, the travel information system, travel literature and publications, audiovisual production, litter prevention, and safety rest areas.

C. Overview of TxDOT Audit Approach

To provide focus for the audits and to ensure that they address the areas with the greatest potential for risk and opportunity, each audit consists of three phases, which are summarized below.

- **Risk analysis.** The purpose of the risk analysis was to recommend areas for additional study during the more detailed audit analysis phase. Each audit encompasses a large area of TxDOT's business. The risk analysis process obtained input from TxDOT leadership, policy-makers, TxDOT's business partners, and other external stakeholders and perspectives from industry experts regarding risks and opportunities. The audit team then utilized this input to develop recommendations regarding the detailed scope for the audit.
- **Audit plan development.** This phase involves developing a methodology, referred to as an audit plan, for performing the audit based on the scope recommended in the risk analysis.
- **Audit analysis.** This phase involved conducting the fact-finding, data collection, and analysis required to address the detailed audit scope defined in the risk analysis. This phase also included the development of detailed findings and recommendations in each area studied, the development of this audit report documenting these findings and recommendations, and the presentation of the audit findings to the Texas Transportation Commission.

D. Risk Analysis Phase

The scope of the consumer services auditable unit is quite broad, involving a number of TxDOT divisions, district staff, and divergent external stakeholders. Given this broad scope, our risk analysis methodology was designed to efficiently identify key risks across the auditable unit and develop a recommended audit plan that ensures that the audit addresses what is most important. The audit team accomplished this by identifying risk areas through detailed interviews of TxDOT leadership, TxDOT staff and external stakeholders, reviewing existing documentation, and applying Dye Management Group, Inc.'s industry knowledge.

The audit team performed this risk analysis in approximately a 30-day period from mid-November to mid-December 2006 through the following work steps:

- Conduct of issue identification interviews.
- Review of available documentation.
- Identification and ranking of risks and opportunity areas within individual program areas.
- Prioritization of risks across the auditable unit and development of recommendations of areas for further analysis.

The subsections below describe these work steps in more detail.

1. Conduct of issue identification interviews

Targeted interviews were conducted with the chair of the Texas Transportation Commission, AOC members, TxDOT senior managers, TxDOT managers responsible for specific program areas, and representatives of a number of external stakeholders for various program areas within the auditable unit. The interviews were structured to obtain input on the issues and areas of business practice that are materially most important for TxDOT and its external stakeholders. Interviews with TxDOT leadership were designed to provide a perspective on desired audit objectives and the outcomes or criteria upon which TxDOT's performance should be evaluated.

In order to achieve the appropriate level of breadth and depth in our examination of the auditable unit, audit team members conducted 49 issue identification interviews with a wide range of TxDOT leadership, management, staff, and stakeholders across the program areas. Exhibit I-1 below provides a summary of the issue identification interviews conducted.

Exhibit I-1: Summary of Issue Identification Interviews Conducted

	Total	TxDOT Leadership (Commission, AOC, Senior Management)	Division Directors and Program Managers	District Staff	External Stakeholders
Cross functional/overall audit objectives	7	7			
Motor carrier operations	4		2	1	1
Motor vehicles operations	8		4		4
Grant programs	14		9	1	4
Vehicle title and registration operations	7		4		3
Revenue-neutral operations	6		3		3
Travel operations	3		2		1
Total	**49**	**7**	**24**	**2**	**16**

2. Review of available documentation

The audit team conducted a summary review of available TxDOT statutory authority policies, management reports, previous audit reports, and other relevant documents and business practices. This fact-finding helps to introduce the audit team to current policies, management controls, and procedures from which to identify potential risk areas and validate input provided in the interviews. The types of documents reviewed by the audit team included:

- TxDOT's strategic management and policy direction.
- TxDOT's proposed legislative agenda.
- Interim report of the Texas House Transportation Committee.
- Business plans and/or other management planning documents available in each for each of the program areas (i.e., direction statements for new business transformation or technology projects, etc.).
- Recent TxDOT internal audit reports in each of the program areas.
- Other recent audit reports such as the recently completed National Highway Traffic Safety Administration (NHTSA) audit of the traffic safety grants program.
- Available procedure manuals in each business area.

3. Identification and ranking of risks and opportunities within each program area

The audit team identified risks and opportunities within each of the six program areas within the consumer services auditable unit by analyzing the information assembled through the prior work steps and then applying Dye Management Group, Inc.'s existing understanding of industry best practice and evolving or innovative practices regarding the audit area.

The audit team then evaluated each identified risk within the six program areas and ranked each risk as high, medium, or low. The basis for this risk ranking was a qualitative assessment of the degree of risk based on two factors:

- **Materiality.** The potential size of the financial, operational, or other impact to TxDOT from the risk identified. Outcomes from risks in the consumer services auditable unit could take any number of forms, including reductions in existing revenue streams, loss or missed opportunities for new revenue streams, increased costs to deliver services, inefficient delivery of services, and/or significant stakeholder dissatisfaction regarding TxDOT's level of service and/or approach to providing the service.

- **Likelihood or risk of occurrence of the impact.** The audit team determined the likelihood of a risk occurring by applying the result of known research, industry knowledge, and the consultant's professional judgment.

The audit team identified 36 risk areas across the program units. Exhibit I-2 summarizes the risks by program area within the consumer services auditable unit. Exhibit I-3 identifies those risks by program area, which were ranked as high.

Exhibit I-2: Summary of Risks Identified by Program Area

Program Area	Total Risks Identified	High	Medium	Low
Motor carrier operations	4	2	2	0
Motor vehicle dealer/distributor operations	4	2	2	0
Grants programs	8	3	4	1
Vehicle title and registration operations	6	4	2	0
Revenue-neutral operations (outdoor advertising control)	6	0	5	1
Travel operations	5	2	2	1
Multi-program	3	3	0	0
Total: Consumer Services Auditable Unit	36	16	17	3

Exhibit I-3: Summary of Risks Ranked as High

Risk ID	Functional Area	Description
MC1	Motor carrier	Delays in TxDOT's turnaround time for processing oversize/overweight permits
MC2	Motor carrier	Non-competitive classification and compensation of permit specialists
MV1	Motor vehicle dealers/distributors	Limited control over dealer-issued temporary tags
MV2	Motor vehicle dealer/distributors	Extremely long duration for complaint resolution
GR1	Grants management	Limited grants or contracts management experience and/or training for district staff responsible for administering various grant programs

Risk ID	Functional Area	Description
GR2	Medical transportation	Need for improving coordination and relationship with the HHS enterprise
GR3	Medical transportation	Need to further assess impact of various medical transportation operational initiatives on client service and overall program efficiency and effectiveness
VTR1	Vehicle title and registration	Inability to easily implement program changes as the result of aging technology
VTR2	Vehicle title and registration	Dependence of VTR Division upon the Vision 21 initiative to support the transformation of the organization and to more effectively deliver vehicle titling and registration services
VTR3	Vehicle title and registration	Lack of a common customer approach and full functioning integration strategy with the Department of Public Safety (DPS)
VTR4	Vehicle title and registration	Limited use of the Internet as a service delivery channel for performing vehicle titling and registration functions
TO1	Travel	Alignment of Travel Division functions with TxDOT's overall strategic objectives
TO2	Travel	Opportunities for revenue generation at travel information centers and safety rest areas
MP1	Multi-program	Limited coordination or economies of scale in management of call center capabilities across divisions
MP2	Multi-program	Limited integration between the various motor vehicle services functions within TxDOT
MP3	Multi-program	Dependence on technology to implement critical business change

4. Prioritization of risks across the auditable unit and development of recommendations of areas for further analysis

After identifying, analyzing, and ranking the risks in each program area, the audit team then re-ranked these risks on an overall basis across the auditable unit and developed specific recommendations for areas that merited further analysis and study during the audit analysis phase. The audit team utilized the following criteria in determining whether a risk or specific opportunity area merited further study:

- The criticality of the program area or function in meeting TxDOT's strategic objectives.
- The synergy of a program area, or lack thereof, with TxDOT's overall mission and strategic direction.
- Magnitude of current revenue from a program area.
- Potential for new revenue opportunities.

- Opportunities for cost savings.
- Potential for improvements in overall service delivery.
- Potential for alternative service delivery approaches such as private sector partnerships and/or outsourcing of some functions.
- Current or potential stakeholder concerns with TxDOT's level of service delivery.
- Legislative or other policy-maker focus on a program area.

E. Audit Plan Development and Audit Analysis Scope

Based on the results of the risk analysis phase including the prioritization of risks across all scope areas, Dye Management Group, Inc. defined nine study areas for more detailed investigation and analysis during the audit analysis phase. The Dye Management Group, Inc. team, in conjunction with TxDOT's AOC, developed a detailed audit plan for executing these study areas.

The nine distinct study areas defined for more in-depth study are as follows:

1. Evaluation of potential strategies for improving turnaround time for oversize/overweight permits.
2. Opportunities for greater synergies between vehicle registration, other motor vehicle functions within TxDOT, and the driver licensing function in the Department of Public Safety.
3. Increased use of the Internet and other alternative service delivery vehicles for performing vehicle titling and registration functions.
4. Opportunities for consolidation of call center functions currently performed across various TxDOT customer-facing units.
5. Additional revenue opportunities and potential alternatives for organizational re-alignment within the travel and tourism functions.
6. Consolidation of grants management functions, including potential shifting of some responsibilities to grantees through increased use of self-certification.
7. Assessment of the impact of recent operational changes in the medical transportation program and identification of any actions required to improve coordination with the Health and Human Services Commission (HHSC) and prepare for anticipated program growth.
8. Opportunities for improving the overall efficiency and effectiveness of the outdoor advertising control function.
9. Potential strategies for reducing the elapsed time required to complete motor vehicle enforcement investigations.

A brief description of the scope of each of these study areas is presented below.

1. Evaluation of potential strategies for improving turnaround time for oversize/overweight permits

This study area involved an assessment of potential strategies for improving the turnaround time for the processing of oversize/overweight permits. It included a detailed assessment and evaluation of various alternatives for improving turnaround times for this function. Alternatives evaluated included strengthening of the existing internal permitting process, establishing partnerships with the Texas Motor Transportation Association and other potential organizations that could provide these services for their members, and business process outsourcing of all or some part of the oversize/overweight function. The results from this study area are contained in Section II of this report.

2. Opportunities for greater synergies between vehicle registration, other motor vehicle functions within TxDOT and the driver licensing function in the Department of Public Safety

This study area was designed to address the risks identified by the audit team in terms of the need for greater synergy between TxDOT's three divisions that perform motor vehicle service functions and the need for improved coordination (such as a common customer approach) between TxDOT's Vehicle Titling and Registration Division and the driver licensing and vehicle inspection functions within the Texas Department of Public Safety. Potential opportunities for additional coordination and collaboration between the International Registration Program (IRP) in TxDOT's Vehicle Titling and Registration and the International Fuel Tax Agreement (IFTA) program in the Comptroller's Office was also analyzed.

This study area involved a review and analysis and the development of recommended approaches for achieving greater coordination and synergy between all of Texas' motor vehicle services functions. It included an analysis and development of recommendations for better coordination between the motor vehicle functions within TxDOT as well as options for improved coordination with DPS and the State Comptrollers Office. The findings and recommendations from this study area are provided in Section III of this report.

3. Increased use of the Internet and other alternative service delivery vehicles for performing vehicle titling and registration functions

The primary objective of this study area was to explore the option for greater use of alternative service delivery vehicles such as the Internet to provide vehicle titling and registration functions. Some of the options that were examined by the study team include the impact of wider use of the Internet by citizens to renew vehicle registrations and the introduction of Web-based online dealer titling and registration for at least the state's largest franchise dealers. This study area also assessed potential

cost savings, which could be achieved by redirecting transactions to these alternate service delivery channels. It also included an analysis of the impact of potential changes in the revenue sharing model between TxDOT and its tax assessor partners based on changes in service delivery mechanisms and the costs being incurred by each partner. Likewise, the study area included an assessment of the feasibility of having the tax assessors perform some additional transactions that are currently found only in regional offices to offset any loss of revenue based on proposed changes in the revenue sharing model. The results of this study area are outlined in Section IV of this report.

4. Opportunities for consolidation of call center functions currently performed across various TxDOT customer-facing units

This study area involved an analysis of the potential consolidation of some or all call center functions currently performed in individual business units. Alternatives that were analyzed by the team included continuing with some separate call center functions but ensuring joint planning and/or acquisition of call center technology; consolidating most if not all call center functions and establishing a TxDOT customer service function; utilizing additional call center automation and/or the Internet to facilitate delivery of customer service functions and potential outsourcing of some of the consolidated call center/customer service functions. The findings and recommendations of this study area are outlined in Section V of this report.

5. Additional revenue opportunities and potential alternatives for organizational re-alignment within the travel and tourism functions

The purpose of this study area was to examine the organizational synergy of the tourism functions with TxDOT's strategic mission. This study area also analyzed and explored in greater detail possible additional revenue opportunities from travel information centers, safety rest areas, future interstate oasis (if established), and other tourism programs to offset current Fund 6 allocations to tourism programs. This study area also investigated the potential feasibility of privatizing operation of the travel information centers or other program areas. The results of this study area are presented in Section VI of this report.

6. Consolidation of grants management functions, including potential shifting of some responsibilities to grantees through increased use of self-certification

This study area analyzed the potential for greater synergies in managing the public transportation and traffic safety grant programs through the establishment of a common contracts management function across grant programs at the district level. It included an examination of the extent to which there would be any advantage to developing this contracts management function on a regionalized basis versus being

established in each district. Likewise, it included an assessment of the feasibility of privatizing some of the contracts management functions.

In addition, this study area also included an assessment of the need for increased grants management training and skill-building for TxDOT staff. Likewise, the study team also analyzed the potential for increased self-certification by grantees, the extent to which this would be allowed under Federal Transit Administration (FTA) and National Highway Traffic Safety Administration (NTHSA) program regulations, the potential risks to TxDOT of self-certification, and approaches to mitigate the risks identified. The findings and recommendations for this study area are outlined in Section VII of this report.

7. Assessment of the impact of recent operational changes in the medical transportation program and identification of any actions required to improve coordination with HHSC and prepare for anticipated program growth

This study area involved an evaluation of the impact of recent operational changes in the medical transportation program on client service levels and program cost effectiveness and efficiencies. This study area was designed to build on the recent status review conducted by the Texas State Auditor. It assessed the impact of these operational changes on client service delivery and program effectiveness by doing a high-level analysis of call center activity, claims processing and complaints and by conducting some field interviews with providers and clients. The study area also assessed steps required by TxDOT and HHSC to facilitate improved communication and coordination between the agencies and to define actions, which would be required by TxDOT to enable the agency to keep pace with the anticipated growth in demand for client services.

This study areas was initiated prior to the Texas Legislature's action under SB10 to return management of this program to HHSC. A number of the findings and recommendations related to the operations of the program within this study area, however, should still be applicable when responsibility for the program is shifted to HHSC on September 1, 2007. The findings and recommendations for this study area are presented in Section VIII of this report.

8. Opportunities for improving the overall efficiency and effectiveness of the outdoor advertising control program

This study area assessed opportunities for improving the overall efficiency and effectiveness of the management of the outdoor advertising control function. As part of this study effort, the team assessed the current revenue and cost structure of the outdoor advertising program to establish a baseline for analysis of various alternatives and identify what changes in fee structures (if any) would be required to implement

any service delivery improvements. The team analyzed the likelihood of industry acceptance of any increase in fees and the expectations of the industry for service-level improvements as part of any increase in fees. Alternatives to be evaluated in this study area included enhanced automation of the sign inventory, enforcement and billing, and collection functions and business process outsourcing of all or some program functions. The results for this study area are outlined in Section IX of this report.

9. Potential strategies for reducing the elapsed time required to complete motor vehicle enforcement investigations

In this study area, the audit team assessed opportunities for reducing the length of time/elapsed duration of motor vehicle enforcement investigations. This study area assessed opportunities for reducing the caseload for MVD investigative staff. It involved a detailed analysis of the current caseloads, the staffing levels and skills of available investigators, and a process analysis of the enforcement function. The analysis included an assessment of the potential for applying automation such as the development of a case management system as well as an analysis of the impact of different staffing mixes and staffing levels.

In addition, the recommendations from this study area were also assessed for potential application to the Motor Carrier Division (MCD) where a similar medium risk was identified in the initial risk assessment related to delays in investigation and complaint resolution for motor carriers and vehicle storage facilities. The findings and recommendations for this study area are presented in Section X of this report.

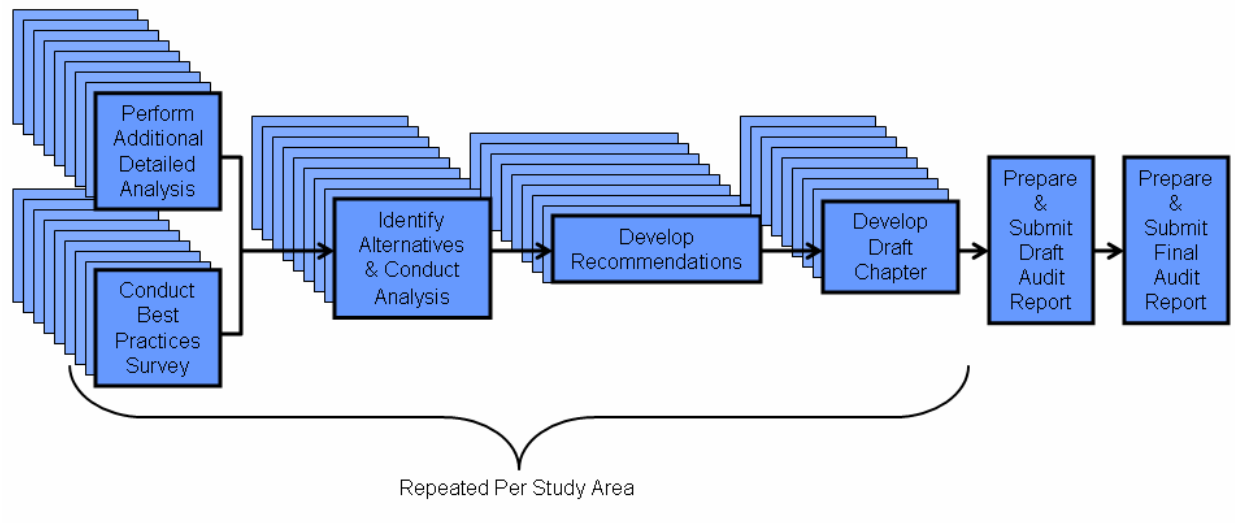
F. Audit Analysis Phase Approach

To execute the audit analysis phase, Dye Management Group, Inc. developed a multi-task work plan that employed a ‘building block’ approach involving tasks from fact-finding and analyses through development of recommendations, definition of transition strategies for implementing the recommendations, the creation of chapters in the preliminary audit report for each study area, and finally the preparation of draft and final reports.

Our audit approach assumed that, in each study area, a technical working-group of stakeholders would be assigned to provide guidance and input to the audit team. This stakeholder team generally consisted of TxDOT management and staff responsible for managing the elements of the study area and external stakeholders representing various elements of the ‘public’ impacted by the study area where appropriate.

Exhibit I-4 highlights our proposed audit analysis approach.

Exhibit I-4: Summary of Audit Analysis Approach



While our audit analysis approach varied somewhat based on the study area, it generally consisted of the following work steps:

1. Preliminary audit report

For each study area, Dye Management Group, Inc. performed the following steps:

1. Establishing, in coordination with TxDOT, a technical working-group of stakeholders for each study area and conducting an initiation meeting with these stakeholders.
2. Performing additional detailed analysis of the subject area including review of documentation and additional detailed interviews of TxDOT and stakeholder staff.
3. Conducting a best practices survey where necessary to supplement knowledge of the audit team.
4. Identifying alternatives to be analyzed in detail and reviewing these alternatives with stakeholders prior to beginning detailed analysis to ensure all appropriate alternatives are being studied.
5. Conducting detailed analysis of each potential alternative.
6. Reviewing the results of our detailed analysis with the stakeholder working-group to ensure that the audit team's subsequent recommendations are being developed based on a set of facts upon which there is general agreement with the stakeholders.
7. Developing recommendations and, where appropriate, a high-level transition strategy for implementing these recommendations.

8. Developing the draft chapter for each study area for the preliminary audit report.
9. Providing this draft chapter to the AOC incrementally as completed and updating the chapter as appropriate based on input from the AOC.

2. Draft audit report

At the completion of the detailed analysis of each study area, the Dye Management Group, Inc. team packaged the individual study area chapters into a draft audit report. This audit report was then presented to the AOC for final review and validation. The work steps in this activity included:

1. Packaging the chapters prepared for the preliminary audit report into a draft audit report, including development of an executive summary and any other report material that cuts across each individual study area.
2. Providing the draft audit report to the AOC for review and input.

3. Final audit report

Based on input from the AOC on the draft audit report, Dye Management Group, Inc. updated the draft report and then published the final audit report. Dye Management Group, Inc. also conducted two presentations of the key findings and recommendations. The work steps in this activity included:

1. Updating the draft audit report based on any input received by the AOC.
2. Publishing the final report and providing copies to TxDOT for distribution.
3. Preparing and providing a briefing on key findings and recommendations for the AOC and other TxDOT management on July 3, 2007.
4. Preparing and presenting a summary of findings and recommendations to the Texas Transportation Commission on July 18, 2007.

The remainder of this report provides a summary of the findings and recommendations for each of the nine study areas reviewed in-depth by the study team during the audit analysis phase.

II. Study Area #1: Evaluation of Potential Strategies for Improving Turnaround Time for Oversize/Overweight Permits

■

The Motor Carrier Division (MCD) of TxDOT is responsible for the issuance of oversize/overweight permits. During the initial risk assessment process, the audit team identified and documented three risks related to the issuance of oversize/overweight permits. These risks were:

- **MC1**: Delays in TxDOT's turnaround time for processing oversize/overweight permits.
- **MC2**: Non-competitive classification and compensation of permit specialists.
- **MP3:** Dependence on technology to implement critical business change.

In addition, the team identified a medium risk in another area of MCD's operations related to delays in investigating and resolving complaints about motor carriers and vehicle storage facilities. The audit team felt this risk could potentially be addressed through some shifting of full-time equated positions (FTEs) from the oversize/overweight function to MCD's investigative functions once the oversize/overweight permitting program was operating more efficiently.

To address these risks in more detail, the audit team defined a study area to assess potential strategies for improving the turnaround time for the processing of oversize/overweight permits. The study area also included an assessment of whether the observed delays in investigating and resolving complaints about motor carriers and vehicle storage facilities could in fact be addressed by shifting some FTEs from the oversize/overweight function to MCD's investigative functions as these resources became available for redirection following the institutionalization of new technology or changes in the oversize/overweight function.

The oversize/overweight study included a detail assessment and evaluation of various alternatives for improving turnaround times for this function. Alternatives that were evaluated included strengthening of the existing internal permitting process, proceeding with the planned implementation of the proposed Texas Permit Routing and Optimization System (TxPROS) application to automate much of the permit routing process for most types of permits, establishing partnerships with the Texas Motor Transportation Association and other potential organizations that could provide these services for their members, and business process outsourcing of all or some part of the oversize/overweight function.

A. Summary of Findings and Recommendations

As part of this study area, the Dye Management Group, Inc. audit team conducted an in-depth review of MCD's Oversize/Overweight Permits Section. The team also conducted a high-level review of the MCD Investigations unit to assess whether this unit would benefit from the potential re-direction of headcount from the oversize/overweight function as automation or privatization reduced the number of required FTEs in this function. Interviews with management, staff, and external stakeholders were conducted to obtain a detailed overall interpretation of the facts and issues that were facing the employees and clients of these two MCD sections.

A number of the recommendations contained in this audit were already under consideration by MCD management. The audit team found that the Motor Carrier Division is a well managed organization that, over the last several years, has been struggling with increased permit application volume activity without a parallel increase in staff resources. There has also been a substantial increase in the number of loads requiring super load permits. The increased complexity of the loads being transported combined with the fact that most permit applications must be processed manually has resulted in increased processing time for oversize/overweight permits. Input from both MCD and the state's motor carriers that routinely haul super loads suggests that these trends in terms of the volume and complexity of permits are expected to continue for the near future. This increase in the volume and complexity of permits is exacerbated by turnover among permit officers. During the previous seven fiscal years, the turnover of permit officers averaged 23% overall with a 12% turnover rate during the last fiscal year. The cost of interviewing, hiring, and training new staff is substantial and averages $30,000 for each vacancy during the first six months of employment.

Consequently, TxDOT is not currently meeting industry expectations for processing oversize/overweight permits, nor is TxDOT achieving its own internal level of service goals in this regard. Because of the increased processing time, carriers are faced with delaying shipments, which results in financial losses to the carrier of approximately $100 per load per hour, which is ultimately passed on to the public. Alternatively, some carriers may choose to transport oversize/overweight loads without a permit, which threatens the safety of the traveling public and could result in structural damage to the state's transportation assets. If a carrier fails to get a permit, this also represents lost revenue to TxDOT.

MCD has developed requirements for and is currently in the process of procuring TxPROS, an automated routing system. It is MCD's objective to leverage the new automated routing system to process many of the routine permit requests and reduce the turnaround time of these requests, while focusing MCD staff on the increasing number of super load permit requests. The TxPROS project should reduce the volume of single-trip routing (STR) permit applications now manually processed by section staff. The TxPROS system is projected to be able to initially issue up to one half of each day's STR permit volume. This equates to 864 TxPROS issued STR permits daily or the workload of approximately 18 permit officers.

A number of other states have attempted automated routing solutions with different degrees of success to date. The requirements and functionality envisioned in the Texas solution are more extensive than those implemented to date in other states. This creates an additional element of risk in terms of implementing and deploying the automated solution, realizing a return on investment, and achieving a reduction in permit turnaround times in the timeframe desired by TxDOT.

Based on our analysis, Dye Management Group, Inc. recommends that TxDOT proceed with development and implementation of the TxPROS initiative. The potential for major improvements in permit turnaround time hinges on the successful and timely implementation of this capability. Significant effort has already been invested in the TxPROS initiative, and the audit team believes that the implementation of this software provides the best opportunity for driving substantive change in this business process within the next two to three years. Florida has implemented a successful outsourcing program; however, moving toward privatization in Texas would be a costly proposition. The differences between Florida and Texas operations are significant, and implementing a similar program with TxDOT would require an additional two- to three-fold level of effort by a contractor.

The audit team evaluated the Florida privatization model and felt that the TxPROS initiative was the proper solution to significantly improving permit throughput in Texas for the following reasons:

- Florida's operational model is substantially different from the TxDOT model and requires the permit applicant to accept a higher degree of risk by requiring applicants to route their vehicles and loads themselves.
- Early and ongoing efforts by the project team to identify and document lessons learned from other states that have implemented projects similar to TxPROS will also help the project team avoid or mitigate the identified challenges experienced by other states' technology projects.

The implementation of TxPROS will allow TxDOT to transform its service delivery of the oversize/overweight permitting process. However, it is projected that TxPROS will require a minimum of 18 months to implement and will subsequently be fully institutionalized within 30 months. At the same time, the motor carrier industry is facing substantial and unacceptable turnaround times for permits now, with real and measurable business costs to the industry. Additionally, there is always the risk that TxPROS, because it is a complex software initiative, will take longer than planned to complete. Thus, the audit team believes that it is imperative that TxDOT take some immediate steps to further improve turnaround times and overall performance of the permitting function in the short term, pending the TxPROS implementation. These interim action steps include:

- Deploying the new headcount authorized by the Texas Legislature for MCD to implement a single application-processing queue regardless of the method by which the application is received.

- Encouraging additional organizations and especially permit services to join the TXDOT self-service permitting function known as the Remote Permit System (RPS).
- Updating the TxPROS risk management plan with specific contingencies for changes to existing systems and/or adjustments to business processes that may be triggered if the TxPROS implementation encounters any unanticipated delays.

In addition, even with the implementation of TxPROS, there will be substantial work for permit officers to perform manually, including routing of super heavy loads. These are the most complicated routings and present the highest risk to the safety of the traveling public and to TxDOT's infrastructure. Because of the technical nature of the work that the permit officers are doing and the criticality of this work in terms of safety and preserving the integrity of TxDOT's asset infrastructure, we believe it is appropriate to reclassify the permit officers from clerical to professional in a job class that reflects the high level of complexity and degree of the impact of their decisions. In addition, as part of this reclassification process, the salary structure of these staff should also be evaluated and assessed against the market for similar technically focused, analytical work in the Austin area.

Finally, as part of this study area, the team also assessed the opportunity for improving turnaround times of the MCD consumer protection and motor carrier investigation functions by the re-direction of FTEs from the oversize/overweight permitting process as TxPROS or other improvements are implemented. The institutionalization of TxPROS is anticipated to make available approximately 15 to 22 FTEs depending on the specific envelope sizes which can ultimately be performed on a self-service basis through TxPROS. The audit team believes that the efficiency of this function can be improved by providing staff with updated hardware and other technology and the implementation of case management software. Once the enhanced technology is initially applied, it may then be appropriate to assign some additional staff to this function incrementally to fully meet outcome-based level of service targets established as part of MCD's detail business planning.

The remainder of this chapter describes our analysis of this study area in more detail. It includes an overview of the two Motor Carrier program areas included in the scope of this study area, a review of the risks included in the study area for further analysis, and a discussion of the audit analysis approach for this study area. It also includes a review of best management practices and a summary of program activities by other peer states, a detailed discussion of the various programmatic alternatives reviewed by the audit team, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

TxDOT's Motor Carrier Division (MCD) oversees the operation of motor carriers and licenses vehicle storage facilities in Texas. Functions performed by the division include credentialing motor carriers to operate on highways, issuing permits for oversize/overweight loads, and administering consumer protection programs. Two specific

functions of MCD were included in the scope of this study area: the processing of oversize/overweight permits and the investigation closure rates in consumer protection programs (from the perspective of potential transferability of solutions and/or re-allocation of FTEs based on the achievement of efficiencies in the oversize/overweight permitting process). A brief synopsis of these two program areas is provided below including program objectives, customers, stakeholders, service delivery channels, and major trends.

1. Issuing oversize/overweight permits

The Oversize/Overweight Permits Section is responsible for issuing permits to transport loads that cannot be reasonably divided into legal loads. The section's goals in performing this function are to support the state's economy while also protecting the safety of the traveling public and preserving the state's transportation infrastructure through appropriate routing of oversize/overweight loads. The section's primary customers and stakeholders are the state's motor carriers. In addition, to process a permit application and determine the appropriate route for the load, the Permits Section must synchronize with permit coordinators in TxDOT district offices regarding district maintenance projects and TxDOT bridge engineers on load limits and clearances.

The section issued 522,638 permits in Fiscal Year 2006 via telephone, facsimile, and Internet within the Central Permit System (CPS) Internet access program. Permit applications are also self-issued by some carriers or other third-parties using the Remote Permit System (RPS) functionality within CPS. This program allows carriers or a permit service to issue some permits themselves with quality assurance oversight from TxDOT. The Texas Permit Routing and Optimization System (TxPROS) is another application facility that is currently being developed by TxDOT to facilitate permit application processing. TxPROS will have the ability to automatically generate and evaluate potential routes for oversize and overweight loads. Carriers will be able to self-route many of their loads through TxPROS over the Internet via the existing CPS application.

In addition to an increase in the overall volume of permit requests, the section is experiencing an increase in the complexity of the loads. The growth rate for super load permits has experienced an increase of 162% during the last twelve months and this rate of growth for super load permit requests is expected to continue for the near future.. This includes loads requiring route inspections, loads between 200,001 and 254,300 GVW and house moves. These super loads require complex manual routing, extensive documentation reviews and coordination with numerous entities, which can include TxDOT district offices, TxDOT's Construction Division, TxDOT's Bridge Division, and in some cases the services of a contracted engineer.

To address the increase in the various types of super load permit requests, the section has reallocated staff resources from single-trip routed permit issuance to super load permit issuance, resulting in increased turnaround times for all types of

oversize/overweight permits. Because of this increase in permit turnaround time, the state's motor carriers, based on discussions with a number of industry stakeholders, are generally dissatisfied with the overall turnaround time presently being achieved by the Oversize and Overweight Section.

2. Consumer protection programs

Consumer protection functions performed by MCD include coordinating the statutorily mandated consumer protection program for consumers of services of household goods, movers and investigating complaints against motor carriers and vehicle storage facilities. Specific tasks performed include processing complaints, conducting investigations, and assessing administrative penalties. Customers and stakeholders of the consumer protection programs are the general public and the motor carriers and vehicle storage facility operators who want to ensure a level playing field through consistent enforcement of the state's laws and regulations. Currently, there are a limited number of investigators to research complaints and limited enforcement authority to collect fines from and revoke licenses of non-compliant motor carriers and vehicle storage facility operators.

C. Risk Identification and Assessment

Exhibit II-1 provides a summary of the key risks identified during the initial risk assessment that were included in this study area for additional analysis. Each risk is then described in further detail below.

Exhibit II-1: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Oversize/ Overweight Permits	Delays in TxDOT's turnaround time for processing oversize/overweight vehicles	High	• Potential loss of business for motor carrier industry • Potential threat to safety of traveling public
Oversize/ Overweight Permits	Non-competitive classification and compensation of permit specialists	High	• Potential loss of trained staff • Potential damage to infrastructure assets

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Consumer Protection Program	Delays in investigation and complaint resolution for motor carriers and vehicle storage facilities (opportunity for improvement through potential re-allocation of staff freed-up by improving the efficiency of the oversize/overweight process)	Medium	• Increased probability of contracting with non-compliant household goods movers and other motor carriers • Industry concern that not all vendors are compliant and hence on even playing field from a competitive perspective • Risk to traveling public and infrastructure from carriers who are not complying (i.e. do not have insurance, etc.)
Multi-Program	Dependence on technology to implement critical business change	High	• Delays in achieving service improvements and/or cost savings due to delays in implementing mission critical technology initiatives

1. Delays in processing oversize/overweight permits

The increase in overall permit application volume and the complexity of the loads being transported combined with the fact that most permit applications must be processed manually has resulted in increased turnaround time for oversize/overweight permits.

Because of the increased processing time, carriers are faced with delaying shipments (which results in financial losses to the carrier) or transporting oversize/overweight loads without a permit, which threatens the safety of the traveling public and could result in structural damage to the state's transportation assets. Due to the significance of the economic and safety factors involved, the ranking for this risk is high.

2. Staffing and compensation

Over the past four years, the volume of daily permit requests has increased an average of 25% to 28% with no increase in staffing. The volume and complexity of work assignments should be examined to determine the proper compensation and classification levels for these employees. Each of the 54 permit officers performs

duties that include analysis and mathematical calculations in order to properly validate application details and issue permits for the movement of oversize and overweight loads. Due to the potential loss or burnout of these officers, the ranking for this risk is high.

3. Investigation and complaint resolution delays

The MCD has a limited number of investigators to research complaints about household goods movers, motor carriers and vehicle storage facilities. This causes delays in completing investigations and pursuing enforcement actions against potentially non-compliant operators, thereby increasing the probability that Texas consumers will unknowingly contract with a non-compliant operator who may not be carrying the required insurance or using required contract provisions. Investigation delays also result in an unfair competitive advantage for the non-compliant operators who can charge more competitive rates than the operators who comply with state laws and regulations. The relative significance of the economic and safety factors involved result in a medium ranking for this risk.

4. Dependence on technology to implement critical business change

MCD is clearly dependent on the timely and successful implementation of re-engineering and/or automation initiatives to be able to deliver critical business change needed to significantly improve service levels and achieve operational efficiencies. It is important to note, however, that MCD management has developed and is implementing elements of a multi-year strategic plan that is designed to continually make improvements to client services, financial and internal processes, and staff development.

The TxPROS automated routing software being planned by MCD is envisioned to process up to 50% of all single-trip routed permits that account for over 83% of all permits issued. It is critical that senior management's ongoing attention and focus be maintained on this initiative in order to ensure that the project scope is tightly managed and intermediate deliverable dates are achieved so that the project is completed on time and on budget and that the division begins to achieve the targeted return on investment from this project.

D. Audit Analysis Approach

To further study and analyze the risks included in this study area, the audit team established a technical working-group of stakeholders to provide guidance and input to the audit team. This stakeholder team consisted of TxDOT management and staff responsible for managing the elements of the study area, and external stakeholders representing various elements of the 'public' impacted by the study area where appropriate. Those participants serving as members of the Motor Carrier Division stakeholder group included:

- Carol Davis, Director, Motor Carrier Division.
- Ray Hutchinson, Permit Section Manager.
- Pamela Carter, Permit Unit Supervisor.
- Connie Noble, Permit Officer.
- Becky Park, Permit Officer.
- Paul Rollins, Engineering Assistant, TxDOT Construction-Materials & Pavements Section.
- Ted Moore, Director of Maintenance, TxDOT Lubbock District Maintenance.
- Brian Merrill, Construction Maintenance & Fabrication Branch Manager, TxDOT Bridge-Field Operations Section.
- David Brimmell, Light Equipment Manager/Dispatcher, J. C. Evans Construction.

Our audit analysis approach, which was executed in conjunction with this stakeholder team, consisted of the following steps:

1. Conducting structured follow-up interviews with TxDOT staff and external stakeholders to validate the risks and opportunities identified during the initial risk assessment initiative. These interviews also helped to identify organizational relationships, business practices, service performance, and customer relations.
2. Assessing the performance indicators used to measure desired outcomes.
3. Reviewing detailed process, procedures, and information systems capabilities.
4. Evaluating management controls that support management systems and their operational requirements.
5. Conducting a survey of best practices nationally and among TxDOT peer states in regards to processing oversize/overweight permits.
6. Identifying four alternative service delivery approaches to be analyzed in detail and reviewing and validating these alternatives with stakeholders prior to beginning the detailed analysis to ensure all appropriate alternatives would be studied.
7. Conducting detailed analysis of each of the four potential alternatives.
8. Reviewing the results of our detailed analysis with the stakeholder working-group to ensure that the audit team's subsequent recommendations were being developed based on a set of facts upon which there was general agreement with the stakeholders.
9. Developing recommendations and documenting these recommendations in this report chapter.

Work in this study area involved conducting detailed interviews with 15 TxDOT staff and external stakeholders. Exhibit II-2 summarizes these interviews by role and function.

Exhibit II-2: TxDOT and Stakeholder Interviews Conducted

Name	Role	Function
Carol Davis	Director	Motor Carrier Division
Ray Hutchinson	Manager	Oversize/Overweight (O/O) Permit Operations
Joe Barnard	Manager	Motor Carrier Operations (MCO)
Pamela Carter	Permit Supervisor	O/O Permit Supervisor
Missy Bennett	Permit Supervisor	O/O Permit Supervisor
Trinea Moreno	Permit Supervisor	O/O Permit Supervisor
Becky Park	Permit Officer	O/O Super Load Permit Officer
Connie Noble	Permit Officer	O/O Permit Officer & Trainer
Phil Pettit	Supervisor	MCO Investigation Unit
Mike Ellis	Supervisor	MCO Enforcement Unit
David Brimmell	Light Equipment Manger/Dispatcher	J. C. Evans Construction – External Stakeholder
Ted Moore	Director of Maintenance	TxDOT Lubbock District Maintenance
Les Findeisen	Director of Policy	Texas Motor Transportation Association – External Stakeholder
Brian Merrill	Construction Maintenance & Fabrication Branch Manager	TxDOT Bridge – Field Operations Section
Paul Rollins	Engineering Assistant	TxDOT Construction – Materials & Pavements Section

E. Best Practices Survey of Other States

As part of our analysis effort, Dye Management Group, Inc. conducted a survey of other states to determine the service delivery approaches utilized for overweight and oversize permitting. The goal of this survey effort was to identify alternative methods to address the division risks identified in the initial Risk Assessment report. The survey results were intended to help the audit team to understand the success of different approaches in peer states and to identify and document best practices and lessons learned and assess their applicability to TxDOT. This task was performed through a review of available business and system documentation and telephone discussions with appropriate staff in each state.

States targeted for the survey effort included states that were either similar in size to TxDOT or had technology initiatives that were comparable to the TxPROS initiative that MCD is currently pursuing. The audit team performed an Internet literature search and contacted the American Association of Motor Vehicle Administrators (AAMVA), and the American Association of State Highway Transportation Officials (AASHTO). Additional input was also requested from the Southern Association of State Highway and Transportation Officials (SASHTO) and the Western Association of State Highway and Transportation Officials (WASHTO) sub-committee chairs for highway transport. SASHTO and WASHTO are regional organizations of AASHTO.

Discussions with representatives in nine other states were also undertaken to identify best practices in their jurisdictions. While these states all perform oversize/overweight permitting, it is important to realize there are a variety of differences between these states and Texas in terms of the size of the state, the volume and complexity of permits, the number of road miles and the number of bridges among other factors. These factors influence the extent to which a best practice in one state may or may not be applicable to Texas. In addition, most of the best practices being utilized by peer jurisdictions are already in use by MCD.

Key findings from each of the surveyed states are summarized below.

1. Alabama

The Alabama Maintenance Bureau's Oversize and Overweight Permit Office has a staff of twelve and processed 119,572 permits during the last fiscal year. It receives 70% of its permit applications via the Internet, 19% by telephone, 10% by facsimile, and less than 1% from walk in applicants. In the near future, Alabama will be implementing a new self-routing/issuing permit system.

2. Arizona

The Arizona Department of Transportation (ADOT) has an online system wherein the applicants can access a database that allows them to input application information directly into the system. Arizona is currently working with the motor carrier industry to redirect permit applications from the original fax submission process to the new online system.

3. California

The California Department of Transportation (CalTrans) has been working on an online system called TPMS (Transportation Permit Management System) for several years and has encountered a number of problems in completing the development of this software, including working with multiple vendors to complete the effort. A new vendor has recently been engaged, but there is no projected new target implementation date.

4. Florida

The Florida Department of Transportation (FDOT) has engaged a private contractor to perform overweight and over-dimensional permitting. Florida's permit applicants are required to develop the route for the load, and then the FDOT contractor validates the applicant's selected routing. Florida does not route loads based on height and requires that the permit applicant be responsible and aware of any height issues along the desired route.

5. New Mexico

The New Mexico Department of Transportation (NMDOT) uses an Internet permitting system, provided by a third-party provider. New Mexico also accepts faxed applications which are processed by state personnel. New Mexico has changed permitting systems twice in the last ten years. New Mexico also requires the applicant to route their own loads and submit them for final approval to the central permit office.

6. North Carolina

The North Carolina Department of Transportation (NCDOT) currently offers: a direct fax permit program, submission via the Internet, walk-in submission, and submission by the U.S. Postal Service. Additionally, once authorized, permits are provided through 40 separate permit services. North Carolina does not provide any independent permit issuance by carriers or permit services. However, once North Carolina updates its current system with GIS data, a carrier will be able to obtain an online permit if its load complies with pre-set envelope parameters.

7. Tennessee

The state of Tennessee utilizes 24 different permit services to issue its over-dimensional permits and is about to release an RFP to upgrade its system to be accessible online.

8. Utah

The Utah Department of Transportation (UDOT) has collaborated with ComData of Dallas to enable ComData to self-issue routine permits in a similar manner to the Remote Permit System (RPS) option currently employed by TxDOT.

9. Washington

The Washington State Department of Transportation (WSDOT) has designed an online program for issuing permits to its customers. WSDOT also has agreements with outside agents to issue permits on its behalf. Both WSDOT and the outside agents use the same online program, but the agents are limited from full access to all of the features of the program by application security logic within the program. This is similar to how RPS and CPS currently function at MCD.

F. Impact of Legislation on MCD Passed During the 80th Texas Regular Legislative Session

During the period of the performance audit, several initiatives passed the Texas Legislature that affected the analysis being conducted by the team in this study area.

The audit team reviewed legislation passed by the Texas Legislature and signed by the Governor in the 80th Texas Legislative Regular Session to examine legislation that will impact the Motor Carrier Division. Three bills specifically impact MCD as follows:

- House Bill 2093 increases certain fees for overweight truck permits with a portion of the increase to be used to address the timely issuance of permits and enforcement efforts against violators of the motor vehicle size and weight laws of this state. This fee increase will provide approximately $100 million in additional fee revenue annually, with most of this revenue going to the highway fund or Texas counties. This bill also provides administrative penalties against shippers and motor carriers, sets forth the administrative hearing process, and provides for injunctive relief. Furthermore, this bill requires a shipper to provide a shipper's certificate of weight with the permit application by the motor carrier in order to partially mitigate the motor carrier's liability if a shipper falsifies the weight on a truck. Finally, this bill provides TxDOT with the authority to deny, suspend, or revoke the registration of a carrier who violates size and/or weight truck statutes.
- House Bill 1 provides 25 additional FTEs to support the oversize/overweight permit function. These additional FTEs were primarily intended to help improve permit turnaround time. It is somewhat open to interpretation whether these additional FTEs can be utilized to support the additional enforcement activities which will be required to support the new requirements under House Bill 2093.
- House Bill 2094 includes a key provision that directs TxDOT and the Texas Department of Licensing and Regulation (TDLR) to develop and enter into a memorandum of understanding (MOU) to transfer to TDLR all functions and activities that are performed by the Texas Transportation Commission and TxDOT relating to tow trucks, towing operations, or vehicle storage facilities. These functions are to be transferred to TDLR by December 31, 2007. The audit team understands that as part of this transfer, five FTE positions will also be moved from TxDOT to TDLR.

G. Analysis of Service Delivery Alternatives

This section summarizes the audit team's detailed analysis of four alternative approaches for providing the oversize and overweight function in Texas. Models analyzed include a status quo model, a technology model, a privatization model, and a partnership model. These models were created to assist the audit team in their examination of how differing change elements might affect service delivery channels within the MCD. Each model was designed to support an independent analysis of an identified delivery approach and was

built for analysis only. These alternative service delivery channels were evaluated against five primary factors, which are as follows:

- Opportunities for cost savings to TxDOT in program delivery and potentially to the industry through improved permit turnaround times.
- Potential for new revenue opportunities through increased fees due to TxDOT providing improved service levels to the industry.
- Potential for utilizing alternative service delivery approaches such as private sector partnerships and/or outsourcing of some functions, which could allow existing TxDOT MCD headcount to be redirected to other underserved functions within MCD.
- Potential to address stakeholder concerns with TxDOT's current level of service delivery.
- Potential to address legislative and other policy-maker focus on the current service levels in this program area.

The goal of these models was to assess which alternative approaches or blends of approaches to improving turnaround times would be the most beneficial to Texas and its motor carrier industry. Our findings in regard to each of these models are discussed in further detail below.

1. Status quo model

This model benchmarks the Oversize/Overweight Permits Section, as it exists today. The MCD Director has authorized 61 FTEs in the Permits Section including 54 permit officer positions. The section is in operation six days a week with normal staffing on weekdays from 6:00 a.m. until 6:00 p.m., and a reduced staff of ten officers and one lead worker on Saturdays during the hours of 6:00 a.m. until 2:00 p.m. While full customer services are offered on Saturdays, this day has evolved to being used primarily to catch up on overflow applications received during the week.

The Permits Section issues over 25 types of permits. During fiscal year 2006, 522,638 permits were issued, of which approximately 83% or 434,041 were single-trip routed (STR) permits. Sixty-one percent of the applications were received via the Internet, 25% by facsimile, and 14% by telephone.

MCD management support staff has done excellent developmental work in identifying and calculating productivity tracking measurements for permit officers. Permit issuance rates are calculated based on the total number of general permits issued per permit officer minus a percentage factor to account for off-line permit assessment activities. Based on these initial productivity findings, a permit officer should be able to issue an average of 48 STR permits each workday and 68 STR permits on Saturday. An average of 36 permit officers issue STR permits each weekday and an average of ten permit officers issue STR permits on Saturday. Overall, the Permits Section should

be able to issue an average of 1,728 STR permits each weekday and an average of 680 STR permits each Saturday.

The staff can issue approximately five Internet permits for every telephone permit that can be issued in the same timeframe. Staff assignments reflect this capability and a larger number of officers are assigned to process Internet applications. These Internet applications can be issued within 1.5 to 4 hours of receipt of a fully completed application. The present telephone queue frequently has applicants waiting up to three hours due to the smaller number of staff assigned to telephone coverage each day based on the percentage of motor carriers using the telephone to apply for permits versus the other channels (Internet and fax).

There are numerous instances wherein a permit applicant, who has already submitted an Internet application, also initiates a telephone application request. The applicants know that they will immediately obtain a permit when their telephone call is answered by a permit officer. The industry reports that the average cost of waiting for a permit is $100 per hour, which includes the cost of the driver and vehicle sitting idle while a permit application is being processed. Most carriers absorb these costs and do not pass this expense on to their customers. Once they obtain their permit either via the Internet or the telephone, they often submit a request to cancel the other application if it has not already been issued. The Permits Section normally will not cancel a valid permit once it has been issued, and the applicant must then absorb the cost of the second permit as a business expense.

Physical space limitations prevent the Permits Section from employing many call center best practices that could further enhance the current level of service and the efficiency of the staff in issuing permits. As a means to address the limited number of available permit officer workstations, MCD management has instituted a telecommuting program for their more experienced staff. Telecommuting enables selected staff to access the Permits Section's data system from home and requires that each participant be in the office one day a week, thus enabling five people to use one workstation on an ongoing basis.

Permit officers are currently classified as administrative assistants on the state's clerical salary schedule. The permit officers' current salaries have a midpoint range of $29,779 for Administrative Assistant II, $33,416 for Administrative Assistant III, and $37,596 for Administrative Assistant IV during fiscal year 2007. The combined mid-point compensation range for the three TxDOT permit officer classifications is $33,597 annually.

Six to eight weeks of classroom training is the average amount of time needed to teach new permit officers basic permitting rules and regulations. However, a minimum of six months of on-the-job training is also required before they are fully competent to perform their duties with limited supervision. Permit officers perform moderately complex customer service work to process and issue permits for oversize/overweight vehicles operating on the state highway system, and perform related work. Officers

normally spend approximately 75% of their time working directly with external customers.

The FY 2006-2008 MCD Strategic Plan contains an overall goal of providing quality service to MCD stakeholders. The plan includes four detailed perspectives. The customer perspective seeks to address the customer service needs of the stakeholders by improving client services and related operations. The financial perspective seeks methods to maximize the MCD budget and organizational structure to support the mission of the division. The internal processes perspective defines and emphasizes division goals and priorities by maximizing and aligning information technology resources and identifying key resources and critical success factors. Finally the learning and growth perspective seeks to ensure staff development, employee satisfaction, and empowerment. The division has also created a MCD Balanced Scorecard in order to measure the degree to which their goals are being achieved and establishes performance measurement targets for each perspective in the plan. MCD management is conscientiously working to increase client satisfaction and improve permit turnaround times. Past improvements include adding mapping and work tools and improving lighting to enhance map-reading activities.

The division also continues to improve information technology processes and implement upgrades to its CPS system in order to streamline IT systems to better accommodate the yearly increase in permit volumes. The division has been experiencing an annual growth rate of 8% since fiscal year 2003, and there is no indication that this growth will diminish anytime soon. MCD management continues to develop project management methodologies to improve overall client service processes and systems.

The key aspects of this model include the following:

Advantages

- There is no exceptional investment in technology that is required by TxDOT in order to maintain current service levels.
- There is no significant change to the permit application process model, although minor adjustments to processing sequences have been implemented.

Disadvantages

- The ability to improve turnaround times within the existing business process is limited without additional technology to enable self-issuance of single-trip routed permits and allow for other innovations.
- The present use of multiple application-processing queues fails to address the lengthy telephone queue wait times.
- TxDOT will continue to experience staff turnover due to compensation and job classification issues.

- Slow permit turnaround times will continue to pressure carriers to transport oversize/overweight loads without a permit thereby continuing to threaten the safety of the traveling public and may result in structural damage to the state's transportation assets.

2. Technology model

This model evaluates the impact of improving permit throughput in the Oversize/Overweight Permit Section based on the presence of a fully implemented Texas Permit Routing and Optimization System (TxPROS). The TxPROS project was initiated on September 13, 2004, and a Request for Offer (RFO) to obtain software and integration services was posted on December 8, 2006. TxDOT's project evaluation team is presently reviewing submitted proposals, and the team believes a contract will be awarded early in the summer of 2007. The projected initial implementation date for TxPROS is currently August 2009.

TxPROS will be Web-based and compatible with TxDOT's base geographic information (GIS) and bridge data systems. TxPROS will add the parameters required for routing, including structure height, lane width, load ratings, one-way attributes, access roads, turn restrictions, and at-grade railroad crossings, and the functionality to update these parameters with construction information and other district-generated restrictions on a daily basis.

TxPROS will have the ability to automatically generate and evaluate potential routes for oversize and overweight loads. This automated routing capability may allow for redeployment of some FTEs to other roles within MCD or elsewhere in TxDOT.

The system, as it has been conceptualized, will reduce the current permit application turnaround time as well as reduce or eliminate backlogs in the specialty permit arena by improving the general permit workload. TxPROS will significantly decrease the amount of time that the permit officers currently have to expend to manually determine the appropriate routing for the load. The automated routing feature could save from 5 to 40 minutes per permit in manual routing efforts for a number of types of permit applications, depending upon the complexity of the application.

TxPROS will, at the outset, process up to 50% of the single-trip routed permits workload each month. The program will be designed to generate automated routings for vehicles and loads that initially fall within a pre-specified size and weight envelope. As confidence in TxPROS increases, the size and weight envelope will expand to include all applications except those requiring super load permits. TxPROS, in concert with the existing Central Permit System (CPS), will enable customers to self-issue permits. Presently, the CPS function enables permit applicants to submit requests for permits 24 hours a day, while the Permits Section is staffed only 12 hours a day. TxPROS routing functions will enable applicants to self-issue most routine permit requests, thereby addressing the existing 24-hour access capability of the CPS function.

Likewise, throughput improvements created by the TxPROS project will make it easier for a carrier to be in compliance with Texas permitting laws. It currently takes longer to obtain a permit than some applicants are willing to wait. The TxPROS implementation will establish an environment that will enable the permit applicant to secure a properly executed permit in an amount of time that will meet the industry's service standards.

In addition, TxPROS will eliminate the labor-intensive and error-prone process of updating maps. Paper maps now have to be updated and replaced every two to three years and the manual updating process is susceptible to errors. The TxPROS program will provide a single source for updating the 'official' electronic-based permit map, thus eliminating the need to completely update and reprint paper permit maps (except for manual backup processing capabilities).

The key aspects of this model include the following:

Advantages

- The proposed TxPROS automated system will significantly improve the permit turnaround times for general permits and should significantly reduce the backlog for processing general permit applications.
- The TxPROS function will provide the capability to process applications on a 24/7 basis.
- Since up to 50% of all single-trip routed permits will initially be processed by the TxPROS system, MCD should be able, once the system is fully implemented and institutionalized, to re-direct some FTEs currently assigned to this function to other areas such as motor carrier and consumer protection investigations functions. Based on the TxPROS business case and discussions with MCD staff, it appears that approximately 15 to 22 FTEs should be able to be re-assigned to other activities following institutionalization of TxPROS. The exact number of FTEs will be a function of the specific envelope sizes which can ultimately be performed on a self-service basis through TxPROS.
- The Construction and Pavement Divisions, along with district staff, will be able to electronically update the restrictions list on a daily basis, which will ensure that all restrictions are immediately available for use during the permit evaluation process.
- Based on the audit team's review of the project management plan and the proposed project scope, it is evident that the TxPROS project team is integrating project management best practices in terms of planning for the development and implementation of this new application. It is a credit to the work of the MCD team that, to date, the TxPROS project team has complied with and integrated these project management methodologies and approaches.

- TxDOT is preparing to select a vendor and initiate development and implementation of TxPROS in the near term.
- Incremental implementations of various aspects of TxPROS will enable the division to embrace cost avoidance opportunities well before the project is fully institutionalized.
- TxPROS will be capable of accommodating the ongoing annual rate of growth the division has experienced since 2003 by supplementing server capacity as processing demands increase.
- TxPROS will eventually be able to process all routine permit applications once the program has been fully institutionalized.

Disadvantages

- TxPROS is a higher-risk technology implementation because the proposed program involves applications that push the envelope in terms of functionality in some areas and includes some functions not yet achieved in other jurisdictions.
- Some other states have encountered cost and schedule overruns when implementing automated permit routing software.
- Critical service delivery improvements and other business objectives that can be realized by the implementation of the TxPROS project will be negatively impacted if any implementation slippage should occur.

3. Privatization model

This model evaluates the potential impact that privatization would have on the Oversize/Overweight Permits Section. This model is primarily based on the elements of the Florida Department of Transportation (FDOT) Over-Dimensional Permits unit privatization contract with Affiliated Computer Services, Inc. (ACS). FDOT's contract with ACS specifies the following performance levels:

- Ninety percent of all routine overweight and over-dimensional permit applications will be reviewed and issued or returned to the applicant if a determination has been made that the permit application is incomplete or does not meet the criteria for issuance of a permit, within three hours of receipt of the application.
- Ninety percent of the non-routine, oversize, and over-dimensional permit applications, not requiring referral to FDOT for some reason, will be reviewed and issued within three working days of receipt of a properly completed application.

- Ninety percent of the non-routine, oversize, and over-dimensional permit applications requiring referral to FDOT will be referred to the department within four work hours of receipt of a complete permit application.
- Ninety percent of the non-routine, oversize, and over-dimensional permit applications requiring referral to FDOT will be issued within four work hours of receipt of a recommendation from FDOT regarding issuance of the permit.
- There will be a $100.00 reduction per non-routine permit application in the monthly lump sum amount for the total number of incomplete non-routine permit applications exceeding 10% of the monthly total non-routine permit count not returned due to incompleteness within four work hours after receipt of the permit application.
- All incoming phone calls received during work hours will be answered within 20 seconds. There will be a $100.00 daily reduction assessed and deducted from the monthly lump sum amount for each workday that more than five calls have not been answered within 20 seconds. There will be a $25.00 per occurrence reduction of the monthly lump sum amount for each occurrence that a customer is directed or allowed to leave an automated message during business hours rather than conversing with a contractor representative.
- Ninety-nine percent of all permit records in the database will be accurately and completely recorded. There will be a $100.00 reduction per percentage point of the monthly lump sum amount for each percentage point, or lump sum thereof, less than 99% of permits with accurate and complete records. This is checked monthly.
- If the contract staff does not contact the customer within one work hour of the initial customer contact, there will be a $50.00 per hour reduction of the monthly lump sum amount for each work hour, or portion thereof, it takes ACS to contact the customer.

The analysis of this model is based on the assumption that in order to meet the same levels of service stipulated in the Florida contract, ACS's ratio of staff to FDOT's annual permit issuance volume of 100,000 permits would equally apply to TxDOT's oversize and overweight permit functions. TxDOT is one of a few states that completely route the applicant's vehicle and load for over-dimensional permitting. Under its contract with FDOT, ACS employs a staff of 16 people, including two managers and 14 permit staff, or one full-time equated (FTE) position for every 7,143 permits issued during fiscal year 2006. Using a similar ratio of FTE to permits issued, a contractor engaged by TxDOT would need to employ a minimum of 73 FTE positions to successfully issue TxDOT's fiscal year 2006 volume of 522,638 permits. If the Permits Section maintains its current 8% annual growth rate, over 40,000 additional permit requests will be processed each year.

During the last fiscal year, FDOT paid its contractor $800,000 to manage and issue Florida's 100,000 over-dimensional permits. This amount does not include costs

incurred by FDOT for management oversight or review of vehicles and loads exceeding envelope sizes beyond that authorized for handling by the contractor.

In fiscal year 2006, TxDOT's Oversize/Overweight Permit Section collected $43.5 million in permit fees. Fifty-four percent of the fees, or $23.6 million, was distributed to the General Revenue fund, and 46%, or $19.9 million, was distributed to the Highway fund. During the same period, TxDOT expenditures for the Oversize/Overweight Permits Section totaled $4,406,306 or 10.13% of revenue and included general operating expenses, fully burdened salaries, maintenance and software contracts.

HB2093 provides for a variable structure of fees and differing distributions to the General Fund and the Highway Fund depending on the length or type of permit, or if the total amount of permit fees collected exceeds $1,000. Initial analysis of the impact of HB2093 indicates that most fees will double but it is difficult at this stage to accurately predict the eventual ratio of distributions between Fund 6 and the General Revenue Fund. However, if you assume that the impact of HB2093 will be a doubling of permit fee revenue beginning in FY2008, this increase in permit fees, combined with an annual growth rate of oversize/overweight permits of 8%, will potentially generate an additional $70 million to $100 million in permit fees per year for each subsequent year.

It is projected that the cost to TxDOT of entering a privatization contract that is constructed in a manner similar to the Florida model would cost over $8.5 million each year at current workloads. An additional expenditure of approximately $350,000 per year would also be required based on the ongoing 8% annual growth rate. TxDOT would incur additional contractual expenses due to the contractor's increased processing time and staff level of effort that would be necessary to route the vehicle and load through the Texas highway infrastructure while being cognizant of all height, width, and weight bridge structure restrictions.

If TxDOT were required to maintain the same gross margin that existed prior to privatization, TxDOT would have to immediately increase permit fee collections by 9.4% in order to continue to distribute similar revenue to the General Revenue and Highway funds. Further margin adjustments would be required as the overall permit growth rate is addressed.

It is important to note that TxDOT permits would be measurably harder to route than similar loads in Florida for a number of reasons, including:

- Florida's permit applicant is required to develop the route for the load, and the FDOT contractor then only validates the applicant's selected routing. TxDOT staff performs either dimensional routing requirements or validation of requested route for each applicant.
- Florida has 41,000 lane miles, as compared to more than 186,600 lane miles in Texas.

- Florida has 6,381 bridge structures, while Texas has in excess of 45,000 bridges.
- Florida does not route loads based on height because it is the responsibility of the customer to be aware of any height issues. TxDOT staff considers all height restrictions when routing applicants' loads.

A telephone survey of the Texas commercial vehicle industry was conducted to obtain industry input on self-routing issues and height restrictions. The survey queried randomly selected Texas motor carriers to determine the level of impact to the permit applicant should TxDOT adopt a policy of requiring the permit applicant to route their own loads and to assume responsibility for height restrictions along the route. Carriers that obtained routine permits felt that there would be a significant level of opposition from the industry, because the motor carriers have come to depend on the Oversize/Overweight Section to properly route their vehicles and loads. They also expressed concerns that most carriers would not have the appropriate skills or knowledge in routing operations to safely route their loads. One carrier stated that giving most carriers that responsibility would be the same as giving "a 5-year-old a gun and assuming they knew how to safely use it."

On the other hand, carriers that transport super heavy loads felt that since they already assume responsibility for route and height restrictions, if TxDOT adopted this policy change, they would then be able to engage their own engineering firms to evaluate their proposed routes and potentially receive their permits more expeditiously than they do presently. Overall, however, the general consensus was that TxDOT's over-dimensional routing activity is a critical service now provided by the state that would have a significant negative impact if withdrawn.

The key aspects of this model include the following:

Advantages

- Establishing a contract with a private vendor that contains stringent performance levels would provide guarantees to the industry concerning the anticipated levels of services to be received, and should the contractor fail to issue a permit within an established timeframe goal, TxDOT could impose penalties based on the contractual language.
- FDOT's contract language mandates that telephone calls be serviced within 20 seconds. Similar TxDOT contractual language would immediately eliminate the extended telephone queue wait times that are being experienced by TxDOT permit applicants but would increase the overall throughput time.
- Privatization of the oversize/overweight permitting process would result in the re-assignment of approximately 48 FTE employees now performing permit officers' tasks.

Disadvantages

- Privatizing the permitting process removes TxDOT's direct control of customer service activities.
- Changes to statutes or rules to require the applicant to supply their routes would increase the risk to Texas' transportation infrastructures.
- Most carriers are not familiar with proper routing operational requirements, and this would significantly increase the incidence of routing failures.
- Because most of TxDOT's bridges do not span water, unlike Florida's, the height of the bridge structure is more critical to the proper routing of an over-dimensional vehicle and load.
- It is estimated that the cost to TxDOT of entering a privatization contract that is constructed in a manner similar to the Florida model, except with the contractor performing all of the routing versus the carrier doing the initial routing, would exceed $8.5 million during the first year, even before adjusting this value to reflect the 8% annual growth factor the Permits Section has been experiencing since 2003.
- Implementation of a privatization contract under this model would require a 9.4% permit fee increase the first year in order to provide for the same level of net contribution to the General Revenue and the Highway funds. Further annual adjustments would have to be made to account for increases in volume growth and administrative oversight expenses.
- Implementation of a privatization model would require a minimum of two years based on the time needed to develop specifications and procure a contractor whereas TxDOT is prepared to initiate in the near term a contract for development of the TxPROS application.
- TxPROS represents a one-time cost to implement improved routing capabilities whereas privatization would require an ongoing annual expenditure for contractual services. These contractual service expenditures would continue to escalate each year whereas TxPROS can expand process capabilities by increasing the server size to accommodate future growth for about $10,000 for a one-time expansion of capabilities.

4. Partnership model

This model evaluates the Oversize/Overweight Permits Section's increased use of permit services through an expansion of the existing Remote Permit System (RPS) function. Participants in the current program are mostly large carriers. There are currently two permit services, which acquire permits on behalf of multiple carriers. In addition, two additional services are expected to join the program following completion of training later this year. RPS participants currently self-issue approximately 9% of each month's total volume of STR permits. Using the fiscal year 2006 average volume of STR permits, RPS participants issued approximately 39,064

STR permits. During February 2007, there were 37 RPS participants including the one permit service.

Each additional carrier or association participating in the program will reduce the volume of STR permits that are now processed by MCD's permit officers. In fiscal year 2006, the volume of permits self-issued by RPS participants was equivalent to approximately 3.2 FTE positions.

At present, any company or permit service is eligible to participate in RPS, although the MCD staff evaluates whether there will be a sufficient volume of potential permits issued to justify the expense of providing training and quality assurance oversight to the RPS applicant.

Companies and permit services participating in RPS must sign a contract that outlines the responsibilities of the participant and of TxDOT. The training provided to the RPS participants includes information on the specific permit types, the routing methodology, receiving and maintaining permit map updates, various vehicle and load configurations, user access, and statutes and rules pertaining to the issuance of oversize/overweight permits.

MCD provides RPS participants with a complete set of district permit maps, and additional copies can be purchased at the option of the participant. It is the participant's responsibility to maintain all updates on the district permit maps. Before the end of each workday, RPS participants receive a daily e-mail containing either a notification of current map restrictions or an advisory that no restrictions were issued that day.

The RPS quality assurance process is the same process used to evaluate MCD permit officers and ensures permits are being issued correctly. When RPS participants enter into the contract, it is understood that their issued permits will be randomly selected for review and critique. Permits are reviewed and scored for routing accuracy, for violations of state statute or rule, and for size limitations. Two or more random permits are pulled for each authorized issuer and critiqued each day. Each issuer's permits are evaluated and the scores are averaged daily. The ongoing running daily average is grouped and averaged together for an overall issuer average.

Daily accuracy statistics are maintained by MCD and faxed to RPS customers weekly. At the end of each month, all participants receive their monthly average score. A 94% or higher monthly accuracy rate must be maintained. Error types are also examined, and if a participant drops below the 94% accuracy rate, steps are taken immediately to ensure that the authorized issuer is aware of the errors. The following actions are taken:

- After the first month, the participant is sent a warning letter suggesting the company request additional training and the participant will be advised of the potential for a contract cancellation.

- After the second consecutive month below 94%, the participant is sent a second warning letter requiring additional training; a contract cancellation will occur if the monthly average does not improve.
- After the third consecutive month below 94%, the participant is sent a letter informing them that their RPS contract has been terminated.

Each month, the participant's monthly totals are averaged on a rolling five-month basis, and if this rolling five-month average or the average for any three consecutive months is below 94%, the RPS contract will immediately be terminated. If, at four months, the participant has an overall average below 94%, a warning letter is sent to the participant informing him that the contract will be terminated if the average does not improve to 94% by the fifth month.

A survey of current RPS participants was conducted to gather their impressions and opinions about RPS. Nine randomly selected participants representing almost 25% of the February 2007 participants were surveyed. Most participants felt that participating in the program enabled them to respond more expeditiously to transportation requests from their clients. The survey also revealed the opinion that TxDOT should offer a discounted permit fee to RPS participants to help defray expenses they incur both through participation in the program and for the sizeable level of effort needed to update the daily map change notifications. Depending on the volume of changes received daily, RPS participants reported that performing map adjustments can consume up to four hours a day for each of the participant's approved issuers. These RPS participants felt that the state should compensate them for expenses that the state would otherwise incur in permit officer expenses. MCD staff expressed surprise at the length of time RPS participants reported map changes were taking. MCD reported that their permit officers can usually make these same updates in 15 to 20 minutes a day.

RPS will ultimately be phased out after TxPROS is fully implemented and institutionalized. At the outset, RPS participants may be authorized to process and issue permit applications that exceed the envelope dimensions that will be initially authorized for individual carriers utilizing TxPROS through the CPS program. It is anticipated however, that as TxPROS matures and MCD becomes comfortable with the quality of the routing generated by TxPROS, the authorized dimensional envelope size will be expanded. As the envelope size available to be routed through CPS expands, it will reduce the value of RPS participation and will cause the elimination of this program.

The key aspects of this model include the following:

Advantages

- Increased participation in RPS by carriers or an increase in the number of participating permit services may improve turnaround times and reduce the number of Permits Section FTEs required to process permit applications.

- Tripling the number of permits issued through RPS by encouraging other organizations to become permit services could result in being able to re-assign eight to ten FTEs to other functions. On average, one permit officer position can be reassigned for every 12,096 permits issued by RPS participants.
- Enrolling a permit service in the RPS will provide a higher return on investment for the Oversize/Overweight Section than enrolling individual carriers since these services would likely issue a larger volume of permits each day for a number of different carriers.

Disadvantages

- There is a cost to MCD to provide RPS training and initial map preparation for each new participant, which reduces the cost savings of RPS participation for TxDOT.
- Management oversight and permit critiquing can absorb a significant amount of available staff time. In order for the RPS participant to be accountable for errors in permit issuance, the issuer must receive timely feedback to correct routing and restriction errors. The permits issued by each participant must be constantly monitored to ensure a sufficient level of accuracy is maintained in order to stay in the program.
- Permit services may be reluctant to invest in joining RPS in the short-term given TxDOT's plans to implement the TxPROS application. The implementation of TxPROS would likely reduce the market opportunity (i.e., the number of permits individual carriers would ask a service to process for them) within about three years of entering the program, as TxPROS is expanded to allow self-issuance through CPS of larger envelope sizes. At the same, however, there is still an opportunity for additional revenue for the permit service in the short-term as TxPROS comes on-line.

H. Key Findings

Based on our review of operational statistics, our best practices survey of peer states, discussions with TxDOT staff and stakeholders, and our detailed review of the various alternative service delivery approaches, this section summarizes our key findings in regards to the oversize/overweight permitting process. It also includes our findings in regards to the potential applicability of any headcount redirection from the oversize/overweight function to the MCD investigations function. These key findings include the following:

1. The current use of multiple application processing methodologies is not effective

The Oversize/Overweight Permit Section currently accepts permit applications by one of three submission channels: the Internet, facsimile, and telephone. Internet usage has increased from approximately 18% of applications in 2004 to over 61% of

applications in the current fiscal year. Applications submitted by facsimile account for 25% of all applications, and telephone applications account for the remaining 14% of the volume. The Permits Section staff can process up to five Internet applications for every one telephone application.

The section assigns its staff based on the potential volume of throughput in order to be as effective as possible. The Permits Section, however, has been trying to encourage use of the Internet to submit applications and has moved staff off the telephones to process applications received over the Internet as the volume of permits submitted over the Internet has increased. This has contributed to a substantial increase in the wait time for applicants calling in permit requests.

Applications received via the Internet are processed by permit officers in the order received in the queue. Turnaround time averages approximately two to four hours. Applications received via telephone are processed immediately while the applicant is on the phone, though the applicant may have a significant wait-time (a number of hours) prior to their call being answered. Applications received via facsimile are processed independently in the order received by a small number of Permit Section staff who are assigned to respond to fax applications. These staff issue permits for delivery back to the applicant by facsimile or email, based on the applicant's preference.

Applicants that do not have Internet access, such as drivers currently on the road or at remote work sites, choose the least productive option (telephone) to apply for a permit. These callers experience extensive hold times but continue to use this channel option because they know that once they get to a permit officer, they will be issued a permit immediately.

The telephone and facsimile application submittal processes also currently allows the permit applicant to 'jump ahead in line' by enabling him to potentially receive a permit more expeditiously than applicants who submit their applications via the Internet. In order to improve their odds of securing a permit in the least amount of time, some applicants use both the Internet and the telephone and submit separate permit applications because these applications are processed from different production queues. Once they receive the first permit by either method, they contact the appropriate section to request cancellation of their second application, which results in lost work efforts by section staff. If the second permit has also been issued, the applicant must then absorb the additional fees for the second permit as a cost of doing business since administrative rule does not allow MCD to refund permit fees unless an error was made by the permit officer.

2. Employee turnover has a negative impact on permit turnaround time

During the previous seven fiscal years, the turnover of permit officers averaged 23% overall with a 12% average during the last fiscal year. The cost of interviewing, hiring, and training new staff is substantial and averages $30,000 during the first six months

for each vacancy. A newly hired permit officer is classified as an administrative assistant and is not fully competent to perform their duties until they have completed up to eight weeks of classroom training and up to six months of on-the-job training.

Permit officers' skills and capabilities are significantly different from other TxDOT employees classified as administrative assistants. The permit officer is required to research and analyze information to make decisions and resolve complicated issues. More importantly, any errors in routing could result in vehicle accidents, loss of life, or damage to structures or surfaces, and may have potential legal implications.

These officers perform moderately complex customer service work when processing and issuing permits for oversize/overweight vehicles operating on the Texas highway system. They are under significant pressure deadlines as permit issuance delays often create a financial hardship for the applicant.

The officer evaluates and authorizes oversize/overweight permit issuance for vehicles based on an analysis of structural capacity, alignment, clearance, and their proposed route of travel. The nature of the work is technical and requires interaction with bridge design engineers, district maintenance engineers, enforcement staff, and outside governmental agencies as necessary. The position requires working with permit applications that are non-routine in nature and require critical research efforts and additional resources to resolve permit application concerns.

Permit officers are currently classified as administrative assistants on the clerical salary schedule. Clearly, these positions are technical and require a level of professionalism to ensure that all routing restrictions and compliance rules are fully evaluated and assessed. An initial review of the State of Texas Job Classification Index did not identify a proper description for Permits Section employees that issue oversize and overweight permits. MCD, however, has recently found a job family description of 'Industrial Specialist' within the administrative or 'A' grouping of job families that may work for permit officers by providing a job family description which is a closer fit to the work performed by permit officers. This job family also has a wider range of levels/classifications within the job family.

3. Delays in receiving permits represents additional costs to the commercial vehicle industry

The industry's average cost of waiting for a permit is projected to be $100 per hour, which includes the cost of the driver and vehicle sitting idle while a permit application is being processed. This cost of delay often leads the permit applicant, who has already submitted an Internet application, to also initiate a telephone application request. The applicants know that they will immediately obtain a permit when their telephone calls are answered by a permit officer.

4. Delays in the commercial vehicle industry's acquisition of permits represent lost revenue for TxDOT and present increased risk to the traveling public and the state's transportation infrastructure

The Texas motor carrier industry is not satisfied with the delays currently being encountered in securing oversize and overweight permits. MCD management acknowledges that the delay in permit turnaround time encourages some applicants to move vehicles and loads that have not secured the required oversize/overweight permits before movement is initiated. There is no accurate methodology for projecting the level of unrealized revenue. However, if we use an estimate of 10% of all permits issued, then there may be around 50,000 unpermitted loads each year. This would represent a loss of revenue to the department of $4 million (based on the current average transaction amount of $80). This loss of revenue will increase when permit fees double as of September 1, 2007, creating a larger impact on a go forward basis. While revenue is certainly lost, a more significant impact may be the potential loss of life due to structure or road damage by unpermitted loads, which can cause a fatal accident.

5. The TxPROS project should reduce the volume of single-trip routed permit applications now manually processed by section staff

The Texas Permit Routing and Optimization System (TxPROS) Request for Offers (RFO) was posted in December 2006 and the capabilities of the respondents are now being evaluated by the MCD project evaluation team. The system is designed to be Web-based and must be compatible with TxDOT's existing geographic information (GIS) and bridge data systems. TxPROS will be linked to the current Central Permit Service (CPS) application program that is accessible by applicants via the Internet. The TxPROS function will provide automated routing data based on current restrictions along the desired route. Implementation of the TxPROS project was delayed by approximately 12 months due to a change in Department of Information Resources (DIR) project management documentation requirements, which necessitated the creation of nine DIR-required documents. This delay also impacted the $1 million funding that was initially secured in FY 2005 and rolled into FY 2006. That $1 million funding will expire on August 31, 2007. Because vendor selection will not be completed until the summer of 2007, there is a potential that up to $750,000 of unspent funding will expire before it can be utilized.

Draft productivity measurements, which were created by MCD management, reflect that a permit officer should be capable of issuing 48 single-trip routed (STR) permits each weekday. The weekday volume of STR permits averages about 1,728 permits and accounts for about 83% of the section's daily workload. The TxPROS system is projected to be able to initially issue up to one half of each day's STR permit volume. This equates to 864 TxPROS-issued STR permits daily or the workload of approximately 18 permit officers.

The TxPROS system will also significantly decrease the amount of time that the permit officers need to manually determine the appropriate routing for permits other than single-trip routed permits. The automated routing feature could save between five and 40 minutes of each permit's manual routing efforts, depending upon the complexity of the application. However, the applicant will have the option of refusing the routing that was automatically generated by TxPROS. These refused routings will then need to be re-evaluated by a permit officer under an exception process.

6. MCD is constrainted in its ability to improve turnaround times without additional technology to enable self-issuance of single-trip routed permits and allow for other innovations

The ability to improve turnaround times within the existing business process is limited without additional technology to enable self-issuance of single-trip routed permits and allow for other innovations. There is also a lack of interconnectivity between the Permits Section and other areas of TxDOT that store bridge specifications and plans. This lack of connectivity increases the permit processing time for super load permit processing, which has been experiencing a volume increase of 100% each year. An application available from the Information Services Division (ISD) entitled 'Arc View' will help this issue, but since it is outside the scope of TxPROS, it will not improve intra-agency connectivity issues.

The growth rate for super load permits has experienced an increase of 162% during the last 12 months. Some examples of volume increases in variousypes of 'super loads,' include loads requiring route inspections (up 22.5% over fiscal year 2006 to date), loads between 200,001 and 254,300 GVW (up 20% over fiscal year 2006 to date), and house moves (up 16% over fiscal year 2006 to date). These super loads require complex manual routing and coordination with numerous entities, which can include TxDOT district offices, TxDOT's Construction Division, TxDOT's Bridge Division, and in some cases the services of a contracted engineer. This rate of growth for super load permit requests is expected to continue for at least the next 10 years as the result of a number of factors related to meeting the needs of a growing economy and a growing population in Texas. This includes new and expanding manufacturing facilities; expansion of oil and gas refineries; increased port traffic post-Katrina and an increase in infrastructure development (i.e. roads, electric transformers, generators, etc).

Updates to the CPS application system are being maintained through an ongoing phased enhancement initiative; however, the audit team observed that a notable delay in the processing of Internet permit applications is created by a free-form data entry window used by Internet applicants to describe their desired route. Permit officers must frequently re-input the route using preferred highway designations, starting and ending points, and the direction and route of travel in order to maintain conformity in permits issued. This then increases the processing time for each non-conforming permit application.

This free-form data entry issue will be addressed as part of TxPROS. In addition, developing an enhancement to the current CPS program templates to capture routing data in a structured format would help to address this issue now pending the implementation of TxPROS. MCD staff, however, has estimated that the effort required to implement this enhancement is significant and thus it would likely not be completed prior to the implementation of TxPROS. In addition, testing of this enhancement would require effort by the same MCD staff, which are needed to participate in the TxPROS design and development effort.

7. Self-issuance of permits needs to be expanded to reduce permit turnaround delays

The Oversize/Overweight Permits Section can enhance its permit issuance rate by continuing to expand the Remote Permit System (RPS). Each additional carrier or permit service can reduce the volume of single-trip routed (STR) permit requests received by the section. This reduction in the permit volume processed by MCD, however, is somewhat offset by an increase in effort by MCD to provide training to RPS participants and to critique permit applications.

During fiscal year 2006, RPS participants issued almost 9% of each month's total volume of STR permits. In May 2007, there were 42 motor carriers and two permitting services participating in the program. Another 32 companies (including three permitting services) are on a waiting list to join the program, 17 of which are likely candidates for the program. Each RPS participant issued an average of 1,056 permits during the previous fiscal year. It has been established that a permit officer can issue 48 STR permits a day or 12,096 STR permits each year. Last year, RPS participants issued the equivalent output of 3.2 permit officer positions in overall STR volume.

An initial week of RPS training is provided in Austin on how to supplement the routing map's preprinted highway information with applicable map changes and restrictions that may be issued daily. Participants then return to their work sites to complete their maps. The participants return two to three weeks later for an additional three weeks of training to learn the basic statutory requirements and routing techniques. At present, any company or permit service is eligible to participate in RPS, however the division staff evaluates whether there will be a sufficient volume of permits issuance to justify the expense of providing training and quality assurance to the RPS applicant. All participants in RPS must sign a contract which outlines the responsibilities of the participants.

8. There will be an opportunity to redirect some FTEs following the implementation of TxPROS

It is anticipated that once TxPROS is fully institutionalized, there will be an opportunity to reduce the current level of FTEs needed to perform the oversize/overweight permitting function. Based on an analysis of the TxPROS

business case and discussions with MCD staff, it appears that depending on the specific envelope sizes which can ultimately be performed on a self-service basis through TxPROS, there could be an opportunity to redirect approximately 15-22 FTEs following the full institutionalization of TxPROS.

9. The average compensation of MCD permit officers appears to be reasonably comparable to similar positions in other jurisdictions when adjusted for cost of living factors

The audit team conducted a survey to assess how the compensation levels of MCD permit officers compared to similar positions in other jurisdictions. The team received compensation information from the states of New Mexico, Alabama, and Washington. Overall, the combined mid-point compensation range for the three TxDOT permit officer administrative assistant classifications is $33,597 annually. The average mid-point compensation range for staff in New Mexico, Alabama, and Washington was $34,480.

Care should be taken, however, to put this analysis into proper context. There are a number of differences between these three states and Texas in terms of the size of the state, the volume and complexity of permits, the number of road miles, and the number of bridges among other factors. In addition, there are differences in the cost of living between Austin and the Albuquerque/Santa Fe, Montgomery, and Olympia areas. New Mexico's permit issuance staff positions are classified as Tax Exam Collectors and Revenue Agents and their mid-point salary is $31,539 per year. In computing cost-of-living comparisons between Austin Texas and Albuquerque New Mexico, a $31,539 salary in Albuquerque equates to a $29,879 salary in Austin, as it is 5.3% cheaper to live in Austin than Albuquerque based on federal cost of living data.

Alabama's permit issuance staff is comprised of engineering assistants, and junior and senior level transportation technologists. Their mid-point salary is $35,900 per year for all three classifications. In computing cost-of-living comparisons between Austin TX and Montgomery AL, a $35,900 salary in Montgomery equates to a $37,570 salary in Austin, as it is 4.7% more expensive to live in Austin than Montgomery.

Washington's permit issuance staff is comprised of transportation planning technicians and their mid-point salary is $36,000 per year. In computing cost-of-living comparisons between Austin TX and Olympia WA, a $36,000 salary in Olympia equates to a $32,400 salary in Austin, as it is 10% cheaper to live in Austin than Olympia.

10. The Motor Carrier Operations Section is not meeting its targeted field investigations unit five-week caseload closing timeframe and is hampered by outdated equipment and a lack of effective case management software

The Motor Carrier Operations (MCO) Section's Investigations unit has 13 allocated positions of which ten positions are staffed and three positions are vacant. There are approximately 49,845 licensed registrants that fall under the authority of the Investigations unit including 43,363 motor carriers, 4,000 tow truck operators, 1,900 vehicle storage facilities and 582 household goods movers. The Investigations unit also has the authority to pursue unlicensed violators and assess administrative penalties. The FY2006 caseload reflected 1,175 new investigations, 1,261 resolved investigations, and approximately 200 investigation cases that were carried over into fiscal year 2007. By June 2007, the number of new cases received had already exceeded the total number of cases received the previous year. In the current fiscal year to date, the section has received 2,250 new cases and resolved 1,550 cases. The section also has 600 pending investigations and 200 additional cases that were being rechecked to ensure continued compliance by the violator. Case assignments are averaging a 12 week closing rate which exceeds the targeted field investigations unit closure rate of five weeks.

The complaint process begins when the Public Assistance unit receives a telephone call, letter, or facsimile from a variety of sources including competitors and citizens. The unit gathers as much information as possible about the complaint including the identifiers of the complainant, the company (motor carrier, tow truck operator, household goods mover, or vehicle storage facility) and the basis for the complaint. A case is currently averaging 243 days from the date the complaint is received by the Public Assistance unit until the date the investigation has been completed. Approximately 80% of all complaints processed by the Public Assistance unit must be forwarded to the Investigations unit for further analysis. When the Investigations unit reviews the particulars of the complaint, the case often requires that additional evidence be collected and/or documented. Once the investigation process is completed, the file is then submitted to the Enforcement unit.

The Enforcement unit reviews the specifics of the investigation and determines whether sufficient information was collected, whether the proper rule or statute was cited as the basis for the violation, and ensures that the penalty assessments are consistent with similar violations in other cases. The Enforcement unit staff conducts a review of cases via computer using the PAIN (Public Assistance, Investigation, and Negotiation) application software. The normal turnaround time is one to two days for those cases requiring no further action (624 cases in FY 2006) and accounts for approximately 54% of the overall volume. Cases involving letters of warning account for 37% (484 cases in FY 2006) of the volume and cases involving administrative penalties account for the final 9% (98 cases in FY 2006) of the volume.

When investigations are conducted, the investigator often has to visit the motor carrier or vehicle storage facility to secure copies of file documents pertaining to the complaint. The investigators currently use an outdated scanner that scans documents slowly and is difficult to use effectively in the field. The investigator also encounters many process sequences that are not in their control such as when waiting for a response from a police department or other information source.

Recently passed legislation (HB2093) authorizes TxDOT to deny or revoke a motor carrier registration or permit for violations and for failure to pay administrative penalties. Also, this legislation gives TxDOT the authority to investigate motor carriers and shippers for violations of oversize and overweight permitting regulations. There is no accurate methodology for projecting the level of permit violations per year however, if permit violations equal 10% of all permits issued, then there may be around 50,000 un-permitted loads each year. A further assumption is that 10% or 5,000 of the un-permitted loads will receive a law enforcement citation and an additional 10% of that number, or 500 violations, will generate active cases for the MCO Investigations unit.

In joint discussions between the audit team and MCO managers, a assumption was made that the source for the new permit violation case referrals may be: 20% (100 cases) from Oversize/Overweight permits staff and 80% (400 cases) from law enforcement referrals. In addition, MCO staff anticipates receiving a significant number of complaints from both the motor carrier industry and from the public. Once networking activities and training sessions are presented by MCO staff to law enforcement agencies across the state, the law enforcement referrals are expected to slowly grow. The projected volume of law enforcement referrals is 10% (40 cases) the first year (FY2008), 50% (250 cases) the second year (FY2009) and 100% (500 cases) by the close of the third year (FY2010). This will be in addition to the ongoing motor carrier and household goods movers' cases in which the MCO anticipates a significant increase in the number of complaints received from individual household goods movers and local household movers associations. Exhibit II-3 presents the caseload volume assumptions through FY 2010.

Exhibit II-3: Projected Yearly Caseload Volumes for MCO Investigations Unit

	FY 2006	FY 2007*	FY 2008**	FY 2009**	FY 2010**
New Cases Rec'd	1,175	2,640	1,196+	1,306	1,556

* FY 2007 projected annual caseload volume, based on the number of cases received through June 2007.

** Projected annual volume of new cases for household goods movers, motor carriers, and new permit violation cases after 60% reduction in case volume from tow truck and vehicle storage facility activities that were transferred to TDLR.

+ This volume represents 40% of the projected FY 2007 new caseload volume, since 60% of the cases will be transferred to TDLR on December 31, 2007 plus 100 cases of new permit violations referred by the oversize/overweight staff plus 40 cases from law enforcement referrals.

A second legislative bill (HB2094) transfers the functions performed by TxDOT that relate to tow trucks, towing operations, or vehicle storage facilities to the Texas Department of Licensing and Regulation (TDLR). The Investigations unit predicts that about 480 active cases will be transferred to TDLR on December 31, 2007. Based on current statistics, about 5% of the cases will be involved in an active hearing process which will require about 2% of the TxDOT MCO investigators time in assisting TDLR for which the MCO investigator must support the chain of investigative evidence during the first half of 2008.

In FY2006, the Investigations staff had an average case closure rate (ACCR) of 10.5 cases per investigator per month. That rate has been steadily improving and is now approaching the targeted goal rate of 17 ACCR. This improved closure rate will enable the 13 allocated investigator positions to close the current caseload as well as the projected future estimated case volumes through fiscal year 2010.

I. Recommendations

This section presents our go-forward recommendations for service delivery of the oversize/overweight permit providing Motor Carrier Division functional activities in Texas. Based on our analysis, Dye Management Group, Inc. recommends that TxDOT resolve current funding concerns related to carry-over of the project budget to future fiscal years and proceed with development and implementation of the TxPROS initiative. The potential for major improvements in permit turnaround time hinges on the successful and timely implementation of this capability. Significant effort has already been invested in the TxPROS initiative and the audit team believes that the implementation of this software provides the best opportunity for driving substantive change in this business process within the next two to three years.

While the implementation of TxPROS will allow TxDOT to transform its service delivery of the oversize/overweight permitting process, implementation of this software is a minimum of 24 months away, with institutionalization of the software with all of the anticipated benefits from the project beginning to be achieved likely another year beyond that. The motor carrier industry is facing substantial and unacceptable turnaround times for permits now, with real and measurable business costs to the industry. Additionally, there is always the risk that TxPROS, because it is a complex software initiative, will take longer than planned to complete. This has certainly been the experience of some other peer states. Thus, the audit team believes that it is imperative that TxDOT also take some immediate steps, which can improve turnaround times, and overall performance of the permitting function pending the TxPROS implementation. This includes utilizing the additional FTEs authorized by the last session of the Texas Legislature to implement a single application processing queue regardless of the method by which the application is received and encouraging additional organizations and especially permit services to join RPS. Likewise,

we think it is critical that TxDOT have a risk management plan with contingencies for changes to existing systems and/or adjustments to business processes, which can be triggered if the TxPROS implementation encounters any unanticipated delays.

In addition, even with the implementation of TxPROS, there will be substantial work for permit officers to perform manually, including routing of all super loads. These are the most complicated routings and present the highest risk to the safety of the traveling public and to TxDOT's infrastructure. Because of the technical nature of the work permit officers are doing and the criticality of this work in terms of safety and preserving the integrity of TxDOT's asset infrastructure, we believe it is appropriate to reclassify the permit officers from administrative to professional in a job class that reflects the high level of complexity and degree of the impact of their decisions.

Finally, as part of this study area, the team also assessed the opportunity for improving turnaround times of the MCD consumer protection and motor carrier investigation functions by the redirection of FTEs from the oversize/overweight permitting process as TxPROS or other improvements are implemented. While the institutionalization of TxPROS is anticipated to make available approximately 15 to 22 FTEs, the availability of any of these FTEs for redirection to the enforcement functions is likely at least 24 months away. In the interim, we believe that the efficiency of this function could be substantially improved by initially providing staff with updated hardware and other technology and the implementation of case management software. TxDOT has identified these needs as well and is currently planning for the acquisition of this technology. Once all technology upgrades are in place, the division should then incrementally assign redirected FTEs to the MCD investigation functions while reevaluating case closure rates for motor carrier investigations.

Exhibit II-4 summarizes our recommendations by proposed timeframe. We then describe each recommended action step in further detail below.

Exhibit II-4: Oversize/Overweight Recommendations Timeline Chart

Recommendation	Within 12 months	Within 24 months
Proceed with development and implementation of the TxPROS initiative as planned	✓	
Develop a TxPROS risk management plan with detailed business contingency plans	✓	
Implement a single application queue regardless of how application is submitted	✓	
Aggressively market the Remote Permit System (RPS) outsourcing program to potential permit services	✓	
Reclassify permit officer from clerical to professional staff	✓	
Secure statutory authority to implement TxPROS exception routing special handling fee		✓
Secure statutory authority to offer a permit application expeditious processing option and special handling fee		✓
Update hardware/equipment and implement enhanced case management software for MCD Investigations unit before adding additional staff positions	✓	

1. Proceed with the implementation of the TxPROS initiative as planned

TxDOT should proceed with finalizing vendor selection and initiate implementation of this project as expeditiously as possible. The audit team felt that the TxPROS initiative was the best solution to significantly improve oversize/overweight permit throughput in Texas. The TxPROS project is being actively managed by a project manager that has significant project development experience and has the benefit of previous successes in implementing technology projects. Furthermore, the high level of MCD support staff experience will contribute to the likelihood of the project's success. MCD staff has made rigorous efforts in order to conform to the Texas Department of Information Resources' project management requirements, as well as additional efforts to follow project management models developed by the Project Management Institute.

2. Develop a risk management plan for the TxPROS implementation including detailed business contingency plans in the event of a delay in the rollout of the software

The TxPROS Risk Assessment Report, which was last revised in August 2006, acknowledges the potential for increased risks in the vendors' development phases of the TxPROS initiative. However, the impact of the risk has not yet been determined. The risk plan reflects that the development timetable be discussed with the selected vendor but does not provide alternative solutions to address unexpected delays in software development phases. Based on the implementation experiences in California, which was analyzed as part of our peer states best practices survey and in other jurisdictions with similar initiatives, the potential for delays in software development schedules and the failure of vendors to successfully implement permit routing software initiatives has negatively impacted achieving planned rollout dates for these programs. California has been working on an online system called TPMS (Transportation Permit Management System) for a few years and has encountered vendor development problems. The California Department of Motor Vehicles has engaged a new vendor to continue the TPMS development, but there is no target implementation date yet foreseen. We recommend that the TxPROS project team assess the impact of potential development delays and prepare alternative plans that would upgrade existing systems to increase functionality and throughput of permit applications until any TxPROS implementation schedule delays can be corrected.

Effective risk mitigation requires that the TxPROS project team keep track of all identified risks, monitoring outstanding risks, and identifying new risks. Mitigation also requires taking an active ongoing role to ensure the execution of risk plans and evaluating the plans' effectiveness in reducing the risk. In support of risk mitigation efforts, the TxPROS project manager should maintain an awareness of all risks throughout the life of the project. Establishing a periodic review of the top ten project risk items will ensure that all risks are effectively tracked and monitored.

Exhibit II-5 presents examples of likely risks on a project of the size and scope of TxPROS and potential mitigation strategies to address the impact of these risks. It should be noted that TxDOT has already taken steps to address a number of these types of potential risks for TxPROS through the change management process defined in the TxPROS project management plan, the statement of work (SOW) for the TxPROS vendor, a deliverables dictionary, and a detailed testing definition/approach.

Exhibit II-5: Potential Risk and Associated Mitigation Strategies

Potential Risk	Likelihood of Occurrence	Mitigation Strategies
Changes in scope as system design and implementation activities proceed	Medium given extensive research and other efforts made by MCD to develop initial specifications	• Tight scope control and adherence to initial system specifications • Steering committee and executive sponsor approval of all scope changes
Challenges in implementing system features not previously implemented in another state	High given the new features and functions proposed for inclusion in TxPROS	Interim checkpoints during software development to gauge any issues with system development Careful system and user acceptance testing to identify any issues Potential implementation of interim manual work-arounds while problem functionality is addressed • Phased-deployment if some functionality is not ready to go-live but the core system functionality is working
Limited internal or external stakeholder acceptance	Low to medium given likelihood of solution to address pressing business issues for stakeholders	• Proactive organizational change management and communication plan

Potential Risk	Likelihood of Occurrence	Mitigation Strategies
Need to train and then support large numbers of external users	High, given large number of external users of the new TxPROS application	• Detailed system and user acceptance testing • Detailed training plan • Training surveys and assessment to validate effectiveness of training being given to external stakeholders • Detailed deployment plan • Sufficient, potentially even additional support resources at go-live and until system is stabilized to address issues encountered by external stakeholders

3. Immediately implement a single application queue for processing permit applications regardless of how the application has been submitted (Internet, fax, or telephone)

The motor carrier industry is facing significant time and cost delays in obtaining permits today and cannot wait until the implementation of TxPROS to obtain relief. One approach, which could help immediately, is the implementation of a single application queue regardless of the method by which the application is submitted. The audit team recognizes that TxDOT's General Counsel will need to be consulted to determine whether Transportation Code, Section 623.081, allows implementation of this recommendation. The single application queue recommendation may conflict with the letter or the intent of the law, which requires TxDOT to issue permits via the telephone.

Implementation of a single application queue can be accomplished through deploying some of the additional FTEs authorized by the last session of the Texas Legislature to capture the application information now submitted by telephone and facsimile and then inputting the data into the existing CPS program. The audit team felt that it was more appropriate to engage temporary employees rather than full-time employees since the implementation and institutionalization of TxPROS will eventually reduce overall Permits Section FTE requirements within the next 18 to 30 months.

This recommendation will enable the section to utilize the single Internet processing queue for all applications. It will also eliminate the advantage now realized by applicants that submit duplicate applications since all permits will be issued in the order they are received. As the needs for separate queues diminish and TxPROS is implemented and institutionalized, these temporary employees will be able to apply for permanent employment status with the Motor Carrier Division. Since the temporary employees will have become familiar with the Permits Section procedures, their training period will be shorter and less costly than newly hired permit officer replacement staff. TxDOT should seek statutory authority to assess a special handling fee for any applications that are submitted via telephone or facsimile once the single application queue has been fully established. Once TxPROS has been fully implemented and permit turnaround times have consistently improved, the Permits Section should also seek statutory authority to offer a permit application expeditious processing option and assess a special handling fee for this service.

4. Aggressively market RPS in an effort to encourage additional organizations and permit services to participate in this function

In order to provide the highest available return on investment in the Remote Permit System (RPS) function within CPS, the audit team recommends that MCD implement an aggressive advertising and recruitment program to secure participation by additional permit services. MCD should also re-allocate resources as required to expedite training any potential RPS participants currently on the waiting list and those participants recruited through this marketing effort. Every additional permit service that is recruited to participate in RPS should be capable of issuing permits that, at a minimum, equal the number of permits issued by the division's permit staff. Using the average volume of 1,056 permits now being issued by individual carriers authorized to use the RPS function, one permit officer can be reassigned for every permit service participant that issues at least 12,096 permits each year.

As has been noted earlier in this chapter, there are some additional costs to MCD as a result of increased participation in RPS. Management oversight and permit critiquing requires staff time and this time will incrementally increase with the addition of each new RPS participant. The MCD provides RPS participants with training that presents information on the specific permit type(s), routing, permit map updates, user access, and statutes and rules pertaining to the issuance of oversize/overweight permits. Likewise, the division has taken great strides to ensure that all RPS authorized users are evaluated using the same criteria used to evaluate MCD permit officers. The division monitors all RPS users on a daily basis and provides the participants with timely quality assurance reports that reflect the users' level of accuracy in permits issued. RPS participants also receive an e-mail of map restrictions or notification that no new map restrictions have been issued before close of business each workday.

The audit team believes, however, that these additional costs to MCD in terms of oversight of RPS participants are more than offset by the savings from having a third-

party issue permits, assuming that the RPS participant actually issues a significant volume of permits. It is because of this need to achieve economies of scale from an RPS participant that the audit team is recommending MCD put a greater emphasis on recruiting permit services that would, in theory, have larger volumes because they would be processing permits for a number of carriers.

In addition to trying to recruit more permit services to participate in RPS, the audit team believes that permit services could also be a source of supplemental staffing to assist MCD in handling peak permit volumes during the implementation and full institutionalization of TxPROS. The audit team recommends that TxDOT enter into contracts with participating RPS permit services to process and issue permit applications for MCD on an as needed basis prior to the implementation of TxPROS. Once TxPROS is implemented, the permit services could then be utilized to supplement MCD staff as needed to process permit applications that exceed the envelope dimensions that will initially be authorized for issuance by individual carriers utilizing the CPS program. Under this approach, TxDOT would pay each RPS permit service a percentage of the fee collected from the permit applicant for each qualifying permit issued by the permit service for TxDOT.

This option would enable TxDOT staff to focus on TxPROS exception processing and super load permit applications. The audit team recognizes that this solution will eventually not be required when TxPROS routing capabilities mature, however, in the interim, it will enable the Permits Section to continue to provide exceptional services, maintain or reduce their current square footage and keep personnel staff requirements at optimum levels.

5. Reclassify permit officers from clerical to professional staff and implement a job classification that recognizes the complexity and degree of impact of their decision-making

The work performed by permit officers is quite technical in nature and mandates that the employee be required to research and analyze information in order to make decisions and resolve complicated issues. Any errors in routing can result in vehicle accidents, loss of life, and damage to structures or surfaces, and may have potential legal implications.

The Motor Carrier Division should seek reclassification of employees that work as permit officers in the Oversize/Overweight Permits Section. These employees should be classified as a professional and be assigned to a job class that reflects the high level of complexity and degree of the impact of their decisions. In addition, as part of this reclassification process, the salary structure of these staff should also be evaluated and assessed against the market for similar technically focused, analytical work in the Austin area.

A proper position title would be 'vehicle size and weight specialist' and could be established with a trainee level classification that would elevate to a vehicle size and weight specialist upon completion of training. Subsequent classification upgrades that reflect increasing knowledge and competence should also be implemented by providing for level II and level III positions. Sample job descriptions developed by the study team for the re-classified positions are provided in Appendix A of this report.

Placing this new job description within the Schedule B classified position salary schedule would be appropriate. Salary groups designated as B5, B6, and B8 would provide salary ranges that are similar to their current Schedule A salaries of A11, A13, and A15. In addition, the trainee level position should be assigned to the B4 salary schedule. The new salary schedule would properly reflect the professional salary classification. An examination of the permit officers present Schedule A salary group when converted to the Schedule B salary group would result in a total dollar value impact $39,911 for all officers in the current fiscal year as illustrated in Exhibit II-6.

Exhibit II-6: Dollar Impact of Changing Permit Officer Classifications

Classification of Positions Change from the Clerical 'A' Salary Schedule to the Professional 'B' Salary Schedule	Number Positions with Salary Adjustments	Number of Positions With No Salary Adjustment	Total Increase in Salary Cost
A11 to B5	20	16	$34,608
A13 to B6	1	7	$4,622
A15 to B8	2	5	$681
TOTALS	**23**	**28**	**$39,911**

An alternative approach identified by MCD during the course of this audit which could have the same outcome is to reclassify permit officers as 'industrial specialists.' This is an existing job family within the administrative or 'A' family which appears to be a better fit than the current job classification with the specialized technical and analytical work performed by permit officers. There is also a wider range of levels within the 'industrial specialist' job family than the current job family.

6. Implement special handling fees for exception routing, telephone and facsimile submission, and expeditious service

As MCD improves the processing times for oversize/overweight permits, it will be appropriate to assess special handling fees for a number of situations where either additional service is provided to a permit application and/or additional resourcing is required to process the application based on the method of application submission selected. Situations for which special handling fees are appropriate include:

- Approximately one year after TxPROS has been fully implemented, TxDOT should secure statutory authority for the Permits Section to assess a special handling fee for those permit applicants who refuse the TxPROS automated routing sequence. The permit officers however, should be able to waive the special handling fee if the refusal is based on a reason that has been pre-approved by Permits Section management.
- Approximately one year after the single application queue has been fully established, TxDOT should secure statutory authority to enable the Permits Section to assess a special handling fee for any applications that are submitted via telephone or facsimile. This fee would help to defray the costs incurred when using temporary employees that respond to telephone and facsimile submitted applications.
- Once TxPROS has been fully implemented and the permit turnaround time is meeting established MCD customer service goals, TxDOT should secure statutory authority to allow the Permits Section to offer an expedited permit application expedited processing option with an additional fee for this service. This recommendation will be effective only when normal processing time has improved to the point that industry needs are being satisfied.

7. Apply updated technology and enhanced case management software to MCD's investigation and complaint resolution activities

The Motor Carrier Operations' investigation and complaint resolution activity can be improved by providing investigators with updated equipment technologies and providing a case management software program to more effectively plan their field appointments. Issuing tablet personal computers with electronic signature capture pads would improve the data capture activities of the investigator. Hand scanners directly linked to the tablet computers will greatly improve efficiencies when capturing file documentation in field locations. Case management software will enhance notification, assignment, and case escalation activities. This software can integrate disparate functions and can be customized to meet ever changing management needs. The program's scheduling capability can group cases by zip code, which would enable the investigators to be more effective when in the field. In order to realize additional synergies in similar investigative functions within TxDOT, a representative from the Investigations Section of the Motor Carrier Division also participated in Study Area Nine of this audit - Motor Vehicle Enforcement Investigations Stakeholder Group, thereby presenting the opportunity for further intra-division solutions (please refer to Section X of this report).

As these technology upgrades are implemented, MCD should then evaluate the performance of its investigation functions as part of its annual business planning process and incrementally assign redirected FTEs from the oversize/overweight permitting as appropriate. The decision to assign some of the FTEs who become available for redirection as TxPROS is institutionalized should be made based on

actual performance against the targeted case closure rates for motor carrier investigations. This evaluation will also have the benefit of additional actual experience with the impacts of HB2093.

In conclusion, TxDOT should proceed with the implementation of the TxPROS initiative. At the same time, the audit team's recommendations for improving turnaround times for oversize/overweight permits and motor carrier operations investigations should be implemented as soon as possible to improve permit process throughput and provide immediate relief for the motor carrier industry, improve investigation and complaint resolution, and aid in the expansion of outside partnerships to enhance the issuance capacity of the Permits Section.

III. Study Area #2: Synergy Opportunities between the Various Motor Vehicle Service Business Units

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This audit study area seeks to identify and evaluate the potential for greater synergies between vehicle registration, other motor vehicle service functions within TxDOT, the toll tag functions within TxDOT, and the drivers licensing and vehicle inspection function in the Department of Public Safety and the International Fuel Tax Agreement (IFTA) program administered by the Texas Comptroller of Public Accounts. The audit team noted the following risks during the initial risk assessment:

- **VTR3:** Lack of a common customer approach and full functioning integration strategy with the Department of Public Safety (DPS).
- **MP2:** Limited integration between the various motor vehicle services functions within TxDOT.
- **MP3:** Dependence on technology to implement critical business change.

The audit team addressed these risks in more detail and consequently identified the potential for greater synergy between the motor vehicle services areas and toll tag operations within TxDOT. The team also assessed the need for improved coordination (such as the common customer approach) between TxDOT's Vehicle Title and Registration Division (VTR), toll tag operations, and the driver licensing and vehicle inspection functions within the DPS and the IFTA program within the Comptroller of Public Accounts. The team conducted a review and analysis of potential synergies between the functional areas and developed recommendations that support greater coordination and synergy between Texas' motor vehicle services functions.

A. Summary of Findings and Recommendations

As part of this study area, the Dye Management Group, Inc. audit team conducted an in-depth review of motor vehicle service functions. Interviews with management, staff, and external stakeholders were conducted to obtain a detailed overall interpretation of the facts and issues that were facing the employees and clients of the department. These key findings are presented in more detail in the following pages, but are generally summarized as follows:

- Texas' population is fast-growing, producing significant increases in customers, vehicles, and transactions each year. Administrative budgets and staffing levels are not expected to keep pace with this growth.
- The motor vehicle services functions within TxDOT operate within the department with great autonomy. While the Appropriations Act and division level planning documents and output measures provide some strategic direction to these functions,

the department's published strategic plan concentrates on infrastructure-related activities and does not provide meaningful direction for the motor vehicle services functions.

- The divisions operate in a working environment made more complex by the large number of statutes in place often defining processes in detail. The same is true of many fees. The statutes and fees are rarely subject to a comprehensive review and tend to be updated on a piecemeal basis.
- To a large degree, the three motor vehicle services functions serve different customer bases related to vehicle administration. The Motor Carrier Division (MCD) deals largely with motor carriers, the Motor Vehicle Division (MVD) concentrates on vehicle dealer licensing, and Vehicle Titles and Registration (VTR) handles issues related to vehicle owners. There is only limited overlap between their operations. We also noted some potential for closer working relationships between the TxTag electronic toll operations and the vehicle registration functions.
- There are currently some challenges in achieving greater synergy between the driver licensing programs in DPS and the vehicle programs at TxDOT, given the driver licensing program's focus on implementation of the federally mandated Real ID requirements.
- However, there are some opportunities for a closer working relationship between the DPS vehicle inspection programs and VTR, which should be pursued in the near-term. For example, there are multiple items displayed on Texas vehicles, including registration and inspection stickers with differing expiration dates, together with toll tag readers and license plates.
- Many business improvement programs have been identified by the motor vehicle services functions for possible implementation over the next several years. There is a need for careful management of these initiatives and coordination across functions as part of these initiatives wherever appropriate.

A stakeholders group consisting of TxDOT management and staff was convened to review the audit findings and to provide guidance and input to the audit team. The stakeholder group reached a consensus opinion that the findings gathered by the audit team accurately represented the pertinent issues in terms of greater operational synergies for the motor vehicle services functions in TxDOT.

Recommendations were then developed by the study team based upon the findings that had been reviewed with the stakeholder group. These recommendations are presented in detail later in this chapter but are generally summarized as follows:

- It is recommended that TxDOT create the position of Assistant Executive Director for Motor Vehicle Services, with responsibility for MCD, MVD, VTR and also the TxTag toll program currently housed within the Texas Turnpike Authority Division. The assistant executive director role will help to ensure that the motor vehicle services functions are an integral part of the Department's strategies and plans. This position

will also lead an integrated strategic planning effort among the various motor vehicle services functions.

The study team reached this recommendation for organizing the motor vehicle services functions within TxDOT under an assistant executive director position after analyzing several different organizational alternatives including among others, maintaining the status quo; merging the three existing TxDOT motor vehicle service functions into a single division within TxDOT; creating a separate state-level department of motor vehicles including the driver license and vehicle inspection functions within DPS; and creating a virtual department linking TxDOT and other agencies' motor vehicle services functions through one or more common customer portals. We found that providing a point of coordination through a single executive responsible for the motor vehicle services functions at TxDOT provided the benefits of an executive level resource dedicated to motor vehicle services, improved business planning among the various functions, provided some potential for additional economies of scale, and a clear executive level point-of-contact within TxDOT for motor vehicle services opportunities with other agencies, while still recognizing and preserving the unique missions and different customer bases of each of the existing motor vehicle services functions within TxDOT.

- It is recommended that TxDOT conduct a comprehensive review of statutes and fees to streamline and, simplify to the extent possible. As part of this initiative, TxDOT should work with the Texas Legislature to seek a change in statute philosophy from the current detailed specifications to broader enabling legislation, with the required detail in more flexible policy-making and fee tables. A similar review should be undertaken regarding the vehicle classification structure in VTR and its related fees to simplify and update.
- It is recommended that TxDOT should work with DPS to determine whether a common customer approach between VTR and Driver Licensing at DPS is a practical solution. If so, TxDOT should negotiate a formal agreement between the two parties.
- It is further recommended that VTR should work with the Vehicle Inspection Division at DPS and TxTag to develop a strategy for a future common vehicle identifier.
- The study team recommends that MVD remain within TxDOT and not move to the Department of Licensing and Regulation (TDLR). The audit team examined the functions of the MVD against the overall strategic consumer service functions of TxDOT and felt that there were solid reasons why MVD should remain with TxDOT. There are a number of operational elements within MVD that support significant synergies with other consumer service functions in VTR and MCD, especially if the 'umbrella' motor vehicle services recommendation is implemented.
- It is recommended that TxDOT move full responsibility for the administration of the Temporary Tag Program (the new -based temporary tag system and any underlying business processes related to the administration of the registration functions associated with the Temporary Tag Program) from MVD to VTR. This transition of

responsibilities will allow TxDOT to most effectively implement the requirements of SB11 and SB1786.

- The study team recommends that TxDOT initiate discussions with DPS about the potential of moving salvage yard licensing from VTR to DPS. DPS is already responsible for investigating complaints against salvage yards. In addition, DPS licenses scrap metal dealers, many of whom also hold salvage dealer licenses. Whereas the licensing and enforcement functions for salvage yards are currently split across two agencies, this recommendation will achieve administrative efficiencies and economies of scale by combining the licensing and enforcement functions for salvage yards within one state agency.
- It is recommended that TxDOT initiate dialogue with the Comptroller of Public Accounts about the potential feasibility of moving the administration of the International Fuel Tax Agreement (IFTA) into the International Registration Plan (IRP) office in VTR. At the same time, responsibility for auditing both programs would be given to the Comptroller. This would represent a shift in responsibility for the audit of IRP from VTR to the Comptroller.
- It is recommended that TxDOT initiate dialogue with DPS about moving responsibility for the disabled driver parking placard from VTR to Driver Licensing in DPS. As part of this recommendation, TxDOT would also eliminate its disabled plate program. This recommendation is based on the placard being more individual or driver dependent (based on medical history) than vehicle dependent. This recommendation would result in having only one identifier, a placard issued by driver licensing that is specific to the driver rather than the two identifier system (placard and plate) that is in use today, and would reduce the cost to the state of maintaining two functionally similar processes.
- It is recommended that the driver licensing program remain at DPS and not be shifted to TxDOT. Further analysis indicates that there are fewer synergies with VTR registration and titling functions than hoped, especially in the short term while driver license focuses on implementing the Real ID initiative. In addition, with driver licensing focused on implementation of Real ID, the timing of any move at this time would be counterproductive.

The remainder of this chapter describes our analysis of this study area in more detail. It includes a program overview, a summary of our review of best management practices in other peer states, a detailed discussion of the various programmatic alternatives reviewed by the audit team, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

TxDOT has three divisions that comprise the motor vehicle services area. These three divisions are as follows:

- Motor Carrier Division.

- Motor Vehicle Division.
- Vehicle Titles and Registration Division.

In addition, during the course of this study area, we also reviewed the operations of The Texas Turnpike Authority Division within TxDOT and, in particular, this division's operations to administer the TxTag electronic tolling program. Likewise, we also explored potential synergy opportunities between TxDOT (principally VTR) and the driver licensing and vehicle inspection programs within the Department of Public Safety and the International Fuel Tax Agreement (IFTA) program managed by the Texas Comptroller of Public Accounts.

The three TxDOT motor vehicle services divisions are described in further detail below, followed by brief overviews of the Texas Turnpike Authority and its toll tag operations and the three programs in other agencies that present potential synergy opportunities.

1. Motor Carrier Division (MCD)

The Motor Carrier Division (MCD) is responsible for the licensing of commercial motor carriers, household goods movers, and bus operators. The division also investigates consumer complaints related to the household goods moving companies it has licensed. In addition, MCD operates the oversize/overweight permit program for travel on state highways.

The primary business functions of MCD are as follows:

- Credentialing motor carriers.
- Issuing oversize/overweight permits.
- Managing consumer protection programs and investigating complaints against motor carriers and vehicle storage facilities.

Each of these business functions is described briefly below.

a. Credentialing motor carriers

The Motor Carrier Operations Section of the MCD licenses vehicle storage facilities and, using a Web-enabled system, registers inter- and intrastate motor carriers (including tow truck operators, passenger bus operators, and household goods movers) to operate on highways. In performing these functions, the goals of the section are to ensure that motor carriers and vehicle storage facilities comply with consumer protection requirements and that motor carriers meet minimum insurance requirements, which serves to protect the safety of the traveling public and the state's transportation infrastructure. The section's primary customers and stakeholders are the state's vehicle storage facilities and motor carriers, including household goods movers and tow truck operators, and consumers of services provided by those entities. Turnaround times for processing registrations have improved significantly over the

last two years. Approximately 80% of registration applications are now processed via the Internet, and application turnaround time has been reduced from 30 days to 48 hours for paper submissions. Applications submitted online seldom require staff intervention and are automatically processed by the system within a few seconds. This reduction in application turnaround time is primarily the result of the implementation of an Internet-based automated application process by MCD within the past two years.

Note: As a result of HB2094, the responsibility for regulating tow trucks and vehicle storage facilities is being transferred to the Department of Licensing and Regulation (TDLR) effective January 1, 2008.

b. Issuing oversize/overweight permits

The Oversize/Overweight Permits Section is responsible for issuing permits to transport loads that cannot be reasonably divided into legal loads. The section's goals in performing this function are to support the state's economy while also protecting the safety of the traveling public and preserving the state's transportation infrastructure through appropriate routing of oversize/overweight loads. The section's primary customers and stakeholders are the state's motor carriers. The section issued over 522,000 permits in FY 2006. This represented an overall 7.8% increase from FY 2005 and a 25% increase since FY 2003.

The section encourages permit applicants to submit applications via the Internet as their primary choice, with facsimile and telephone as the second and last choice option respectively. Internet usage has increased from approximately 18% of applications in 2004 to over 60% of application in the current fiscal year. Those applicants who do not have Internet access, such as drivers on the road or at remote work sites, choose the third option (telephone) to contact the section. These callers are currently experiencing extensive hold times. Some applicants use both the Internet and the telephone and submit separate permit applications, and once they receive the first permit, they call the section to cancel their second application, resulting in lost work efforts by section staff.

Whether permit applications are submitted via the Internet, fax, or phone, the vast majority of these applications (80%) must be routed manually. An MCD permit specialist, who is classified as administrative staff, processes the permit application, analyzes and determines a safe route, and issues the permit in accordance with Texas statutes, Texas Administrative Rules, and department policies and procedures.

In addition to an increase in the overall volume of permit requests, the Oversize/Overweight Permits Section is experiencing an increase in the complexity of the loads and the relative number of super load permit requests. To process a super load permit application and determine the appropriate route for the load, the MCD permit specialist must coordinate with permit coordinators in TxDOT district offices regarding district construction and maintenance projects, which could affect the routing of a load. The MCD permit specialist also coordinates with TxDOT bridge

engineers on load limits and clearances. Thus, the increasing volume of permit requests is also having some resource impact on district staff and Bridge Division staff. To address the increase in super load permit requests, the section has reallocated staff resources from general permit issuance to super load permit issuance, resulting in increased turnaround times for all types of oversize/overweight permits.

MCD has developed requirements for, and is currently in the process of, procuring an automated routing system. It is MCD's objective to leverage the new automated routing system to process many of the routine permit requests and reduce the turnaround time of these requests. This will allow staff to focus more time on the increasing number of super load permit requests.

This business function was analyzed in detail as part of this audit and the findings and recommendations from that analysis is provided in Section II of this report.

c. Managing consumer protection programs

Consumer protection functions performed by MCD include coordinating the statutorily mandated consumer protection program for consumers of services of household goods movers and investigating complaints against motor carriers and vehicle storage facilities. Specific tasks performed include processing complaints, conducting investigations, and assessing administrative penalties. Customers and stakeholders of the consumer protection programs are the public and household goods movers, vehicle storage facilities and motor carriers who want to ensure a level playing field through consistent enforcement of the state's laws and regulations. Currently, there are a limited number of investigators to research complaints and limited enforcement authority to collect fines from and revoke licenses of non-compliant motor carriers, household good movers and vehicle storage facility operators. Recent legislation (HB2094) will transfer vehicle storage facility activities to the TDLR on December 31, 2007.

2. Motor Vehicle Division (MVD)

The Motor Vehicle Division (MVD) responsibilities include the licensing of vehicle dealers, lessors, lease facilitators, manufacturers, distributors, and converters. It also administers the Texas Lemon Law and the Temporary Tag Program. Similar to MCD, the division also investigates complaints against those it has licensed. The primary business functions of MVD include:

- Licensing of all vehicle dealers.
- Licensing of manufactures to supply dealership inventories.
- Licensing of specialty manufacturers, commonly known as converters.
- Licensing of Independent Motor Vehicle, Motorcycle, Travel Trailer, and Semi-Trailer Dealers, Wholesalers and Motor Vehicle Auctions.

- Administration of special use permitting for vehicle shows and static displays that take place away from a dealer's licensed business location.
- Enforcement of code violations.
- Enforcement of Texas Lemon Law.

Each of these functions is described briefly below.

a. Licensing of all vehicle dealers

The Licensing Section of MVD processes applications covering all components of the sale and distribution of motor vehicles in Texas. This section's objectives are ensuring that all dealers are properly licensed and that their facilities comply with all current laws and statutes.

The Enforcement Section of MVD routinely presents training seminars to dealers to educate them about the rules and regulations that govern their businesses. Each seminar includes topics on the laws of advertising, selling, and financing motor vehicles. For this function, the Licensing Section's primary customers and stakeholders are the vehicle dealers in the state.

b. Licensing manufacturers to supply dealership inventories

The Licensing Section of MVD processes applications from manufacturers in order to ensure a sound system of distributing and selling motor vehicles; provide for compliance with manufacturer's warranties; and prevent fraud, unfair practices, discrimination, impositions, and other abuses of Texans in connection with the distribution and sale of motor vehicles. The manufacturer must provide a list of each distributor or representative acting for the manufacturer and each dealer franchised to sell the applicant's products in Texas and their respective locations. The primary customers and stakeholders of the manufacturing licensing function are the automotive manufacturers and franchise dealers doing business in Texas. The goals of this function are to ensure adequate protection for a retail purchaser of the manufacturer's products; to validate the obligation of a franchised dealer under the agreement with the manufacturer; and that the basis for compensating a franchised dealer for labor, parts, or other expenses under the manufacturers' agreement is in place.

c. Licensing specialty manufacturers

The Licensing Section of MVD processes applications from specialty manufacturers known as converters. A converter is a person who, before the retail sale of a motor vehicle, assembles, installs, or affixes a body, cab, or special equipment to a chassis, or substantially adds, subtracts from, or modifies a previously assembled or manufactured motor vehicle other than a motor home, ambulance, or fire-fighting vehicle. The goal of this process is to ensure adequate protection for a retail purchaser of the converter's products. MVD's customers and stakeholders in regards to the

licensing of specialty manufacturers are the motor vehicle licensees, applicants for licenses, and industry associations.

d. Licensing of independent motor vehicle, motorcycle, travel trailer, and semi-trailer dealers, wholesalers, and motor vehicle auctions

The Licensing Section of MVD also processes applications from independent dealers who buy, sell, or exchange any type of used cars and trucks, used travel trailers, new or used utility trailers, and/or semi-trailers. This also includes dealers who may sell or exchange vehicles with other licensed dealers only and dealers who may offer vehicles for sale by bid only to licensed dealers at a bona fide auction at a permanent location. The customers and stakeholders of this activity are the independent dealers, specialty manufacturers, and the public.

e. Administration of special use permitting

MVD regulates the general participation requirements for organized dealer shows and exhibitions. MVD must receive a written notice from the potential exhibitor at least 30 days prior to the opening day of the show or exhibition. MVD then issues a written approval to the applicant. All participants in the event must be licensed by MVD to do business in Texas and be fully compliant with the rules and statutes of Texas. Stakeholders and customers of this process include the motor vehicle industry, the show venues, and the public.

f. Enforcement of code violations

The Enforcement Section of MVD is responsible for responding to complaints regarding sales practices and other violations of the Texas Occupations Code, Chapter 2301 and Chapter 503 of the Transportation Code. This section also brings enforcement actions against those licensees who have violated a previous order such as failing to repurchase vehicles ordered bought back under the Lemon Law. A small but very significant part of Enforcement Section’s role is to protect the Texas franchise dealer from overreaching by the out-of-state manufacturers and distributors who often wield unfair power over a dealer in their day-to-day business.

Approximately 55% of complaints received by the Enforcement Section come directly from consumers. Thirty percent of complaints come from various agencies such as law enforcement and other state, county, or local agencies. The remaining 15% of complaints received come from licensees, mainly dealers who are seeking a level playing field and who look to MVD to make sure everyone plays by the same rules.

g. Enforcement of Texas Lemon Law

The Consumer Affairs Section of MVD administers the rules and statutes of Texas’ Lemon Law. The owner of a motor vehicle or the owner's designated agent may make

a complaint concerning a defect in a motor vehicle that is covered by a warranty agreement applicable to the vehicle. The complaint must be made in writing to the applicable dealer, manufacturer, converter, or distributor and must specify each defect in the vehicle that is covered by the warranty. The owner may also invoke the MVD's jurisdiction by sending a copy of the complaint to MVD. A hearing may be scheduled on any complaint that is not privately resolved between the owner and the dealer, manufacturer, converter, or distributor.

When a complaint is received, it is reviewed by an MVD case advisor to determine whether it meets the jurisdictional requirements of the law. If it does, the MVD case advisor attempts to resolve the complaint through informal mediation, which may include an inspection of the vehicle. Often, a complaint is resolved through mediation within the first 30 to 60 days after filing. If unresolved, it is scheduled for a hearing at a TxDOT location near the consumer's residence. In order to get relief, consumers must prove to an Administrative Law Judge that their vehicle is a lemon. Manufacturers also have the right to appear and present evidence and argument to the contrary. Usually, the judges issue their rulings within 30 to 45 days following the hearing. Customers and stakeholders of the lemon law process include the public, dealers and manufacturers.

3. Vehicle Titles and Registration Division (VTR)

The Vehicle Titles and Registration Division (VTR) is responsible for the registration and titling of motor vehicles across the state. Most of the delivery of services is conducted through the county tax assessor-collector offices across the state, rather than from VTR office locations. The service is delivered by mail, Internet application, or over-the-counter transactions. VTR also issues International Registration Plan (IRP) apportioned registration for commercial carrier fleets out of its regional offices and through the Internet. The division also administers the various license plate programs and the disabled parking permits. Likewise, VTR also includes the Automobile Theft Prevention Authority (ATPA), which is responsible for administering a state-funded grants program designed to reduce the incidence of automobile theft.

The primary functions of VTR as it relates to this study are as follows:

- Vehicle certificates of title.
- Vehicle plate registration.
- Specialty plates.
- International Registration Plan.

Each of these functions is described in more detail below. The scope of APTA and its programs are covered in more detail as part of the Grants Management study area in Section VII of this report.

a. Vehicle certificate of title

When a motor vehicle changes hands, the certificate of title for the vehicle must be reassigned to the new owner. The certificate of title is, in fact, the certificate of ownership. The title transfer process can vary, depending on the reason the title is being transferred, and one of the 254 county tax assessor-collector offices in Texas generally handles the transaction. When a customer buys or sells a vehicle in Texas, state law requires the vehicle to be titled in the buyer's name within 20 working days. If the vehicle is purchased from a dealer, the dealer is required to file the title paperwork at their local county tax assessor-collector office. If the customer buys a used car from a private party, the paperwork is also processed by the local county tax assessor-collector office.

b. Vehicle plate registration

Texas residents who own a motor vehicle must renew their vehicle registrations annually, either in person at their county tax assessor-collector, at authorized agents for their county tax assessor-collector such as some grocery stores, or by mail or online if their county tax assessor-collector has endorsed an available Web-based registration renewal program. About two months before the registration sticker expires, registrants receive a renewal notice in the mail. Registration stickers are valid for one year, although a registrant can opt to prepay for up to three years at a time and automatically receive new stickers each year.

c. Specialty plates

Texas residents who are willing to pay the extra fee required for a specialty license plate have a number of options available to them. A specialty plate is an alternative registration plate that is issued instead of the standard license plate. The specialty plate may display artwork such as a college logo or indicate the owners' special status, such as a Purple Heart recipient. Of the nearly 20 million registered vehicles in Texas, only approximately 1% of the vehicles currently carry specialty plates. Prices vary according to the category of plates, and a portion of the money collected may go to the sponsoring agency, organization, or college. Thirty-six categories of plates are restricted to specific groups of persons or vehicles. Another 17 categories carry no restrictions and may be purchased by any registrant. The clear favorite among unrestricted special license plates sold is the personalized (vanity) plate, in which people often use their initials or names.

d. International Registration Plan

The International Registration Plan (IRP) is a program for licensing vehicles engaged in interstate operations. The fundamental principle is the freedom of vehicle movement that is achieved by authorizing the sharing (apportioning) of registration fees among the states in which the truck travels. Texas was one of the first states to

join IRP, a multi-jurisdictional reciprocity agreement, on September 13, 1973. To qualify for an apportioned IRP registration, a motor carrier or owner-operator must meet specific requirements that pertain both to their area of operations and to their trucks. Under IRP regulations, trucking firms and owner-operators register vehicles in their 'base' or home jurisdiction, defined as where the registrant has an established place of business, where the fleet accrues mileage, and where the operational records of such fleet are maintained or can be made available. The base jurisdiction issues an identification plate and a cab card to the vehicle for the purpose of registration. This identification plate is the only plate required for the vehicle by participating states. The base jurisdiction then collects the appropriate registration fees and distributes them to the other jurisdictions in which the carrier has requested IRP registration.

4. Texas Turnpike Authority

The Texas Turnpike Authority is the division within TxDOT responsible for planning, design, construction, and operation of toll roads being developed by the department or through Comprehensive Development Agreements (CDAs) with oversight by the department. The Texas Turnpike Authority is also responsible for the management of the TxTag electronic tolling program. It was previously a separate agency and was consolidated within TxDOT during the 78th Legislative Session.

In this study area, the team specifically looked at the Turnpike Authority's TxTag program and its interrelationships with the other motor vehicle services programs. The TxTag sticker is a thin device that goes on the inside of the windshield behind the rearview mirror. It is slightly smaller than the vehicle registration or inspection sticker. TxTag uses an electronic chip and the vehicle's windshield´s glass to send its signal to the electronic equipment above the toll lanes on Texas toll roads. The TxTag is designed to be permanently placed on the windshield of a vehicle. It cannot be moved between vehicles without potentially damaging the chip inside the sticker.

In addition to the toll roads under the management of the Texas Turnpike Authority, there are also other toll facilities throughout Texas being developed or operated by regional toll authorities. Examples include the North Texas Tollway Authority (NTTA) in the Dallas/Fort Worth Metroplex and the Harris County Toll Road Authority (HCTRA) in the Houston metropolitan area. Currently, the toll tags issued by NTTA and HCTRA are interoperable with TxTag across the three systems, so a driver can use any of the three tags on the toll roads operated by the other systems.

5. Potential synergy points with functions external to TxDOT

As part of this study area, the team evaluated the potential synergies between the TxDOT motor vehicle services functions and three other programs in other state agencies. These programs are:

- Driver licensing in the Department of Public Safety.

- Vehicle inspections in the Department of Public Safety.
- International Fuel Tax Agreement (IFTA) in the Texas Comptroller of Public Accounts.

Each of these programs is described briefly below.

a. Driver licensing

The Department of Public Safety's Driver License Division (DLD) is charged with maintaining the integrity of the Texas driver license and meeting the agency's goal of traffic safety through the examination of drivers, the improvement and control of problem drivers, and traffic and criminal law enforcement.

This division is also responsible for the implementation of the federal Real ID Act in Texas, which presents a significant challenge to the division. As passed, the statute will have a wide-reaching impact on Texas' citizens as it will require all 20 million existing Texas driver license and identification card holders to present their respective identity credentials to driver license office personnel between May 11, 2008, and May 10, 2013. The Real ID Act's proposed rules are specific and create implementation challenges with operational, legislative, technological, and fiscal limitations. Implementing Real ID will require additional staff, facilities, training, and the development, expansion, and deployment of numerous real-time verification systems.

b. Vehicle inspections

All Texas registered vehicles are required to receive an annual inspection. The inspection program is administered by the Department of Public Safety. Actual inspections are performed by authorized third parties such as dealers, gas stations, and repair shops.

All inspections include a comprehensive safety inspection; however, some vehicles located in designated counties are required to have an emissions test in addition to the safety inspection. Designated counties include: Brazoria, Fort Bend, Galveston, Harris, Montgomery, Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, Travis, Williamson, and El Paso counties. The combined safety and emissions test fees may cost a maximum of $39.50, but inspection stations may offer inspections at a lower fee.

c. International Fuel Tax Agreement (IFTA)

IFTA, which is administered in Texas by the Texas Comptroller of Public Accounts, is an agreement among all states (except Alaska and Hawaii) and Canadian provinces (except Northwest Territories, Nunavut, and Yukon) to simplify the reporting of fuel used by motor carriers operating in more than one jurisdiction. Persons who operate qualified motor vehicles are subject to IFTA licensing. Upon application, the carrier's

base (home) jurisdiction will issue credentials that allow the IFTA licensee to travel in all IFTA member jurisdictions. A qualified motor vehicle is a vehicle used, designed, or maintained for transportation of persons or property and:

- Having two axles and a gross vehicle weight or registered gross vehicle weight exceeding 26,000 pounds or 11,797 kilograms; or
- Having three or more axles regardless of weight; or
- Is used in combination, when the weight of such combination exceeds 26,000 pounds or 11,797 kilograms gross vehicle or registered gross vehicle weight.

Recreational vehicles including vehicles such as motor homes, pickup trucks with attached campers, and buses when used exclusively for personal pleasure by an individual are not considered qualified vehicles under IFTA.

C. Risk Identification and Assessment

Exhibit III-1 provides a summary of the key risks identified during the initial risk assessment that were included in this study area for additional analysis. Each risk is then described in further detail in the narrative following the exhibit.

Exhibit III-1: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Multi-program	Lack of a common customer approach and full functioning integration strategy with the Department of Public Safety (DPS)	High	• Difficulty for law enforcement to easily obtain full information about a citizen's vehicle registration history • Citizens required to have multiple interactions with different state agencies or their agents in order to change their address or other identifying information • Increased cost to the state of processing duplicate transactions and maintaining duplicate information across two agencies • Opportunity for closer cooperation with Vehicle Inspection Division at DPS
Multi-program	Limited integration between the various motor vehicle services functions within TxDOT	High	• Direction, planning and operations focused on individual divisions. No real coordination between divisions • Day-to-day operations of the divisions are self supporting and largely independent of each other

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Multi-program	Dependence on technology to implement critical business change	High	• Most administrative programs require (or will require) technology to operate • Scarce IT resources hamper the upgrading of existing and the development of new automated solutions

1. Lack of a common customer approach and integration strategy with DPS

The state of the practice nationally involves the integration of driver licensing and vehicle registration information through the concept of a common customer. This involves maintaining identifying information about a citizen, such as address information, in one place and sharing this information between the driver licensing and vehicle registration functions. There are a number of benefits to this common customer approach, including:

- **Linking of driver license and vehicle registration information**. Information about a driver and the various vehicles the drivers owns is more easily available to law enforcement personnel in the field.
- **Linking of vehicle registration information and Texas toll tag information**. The integration of toll tag procurement data with the Vehicle Title and Registration database would eliminate the potential for duplicate information and data base requirements. . For example, drivers without an electronic toll tag receive a monthly invoice when they use a Texas toll road. There is no need to prepay or register. Devices above the toll lanes record the license plate of any vehicle without a toll tag. The registered owner of the vehicle receives the monthly bill. The Turnpike Authority's electronic system then uses the Vehicle Titles and Registration Division database to match the vehicle owner to the tag displayed on the vehicle. State law allows 20 working days for titles to change hands, and a temporary tag is issued to the vehicle until the new title is issued in the new owner's name. During this lag time, the Turnpike Authority's system query to the VTR database cannot find a match because the VTR system has not received the new record, which then results in lost toll charges. This situation will be addressed by the development of the Web-based temporary tag application called for in recently passed legislation (SB11). When this temporary tag database and issuance system is implemented, toll authorities will be able to

query the database and receive ownership information based on the temporary tag number.

- **Streamlining of routine customer service transactions**. Integration at the customer level simplifies a number of procedures such as a citizen changing their address when they move within the state. In this scenario, the citizen could, either in person or preferably via the Internet, change his or her address, receive a duplicate/replacement driver's license with the new address, and change the address at which they will receive the renewal for their vehicle registration in one transaction. In some states, customers can even update their voter registration information at the same time.

Currently, Texas does not have a common customer approach to integrating driver licensing and vehicle registration. In fact, there is currently no common customer approach within the vehicle title and registration function. Citizens with multiple vehicles registered currently must change their address multiple times for each vehicle registered.

While driver licensing and vehicle registration are typically administered within the same state agency in other states (regardless of whether this is done in a department of motor vehicles, the state transportation agency, or another state agency), these two closely related functions are in separate agencies in Texas. While vehicle registration and titling is administered within TxDOT, the Texas Department of Public Safety (DPS) is responsible for managing the driver's licensing functions.

Currently, there are only limited interfaces between the systems in the two departments. DPS has a crash records interface with TxDOT's Registration and Title system (RTS). DPS also has access to VTR's RTS database for traffic stop inquiries. The interface is primarily one-way and enables DPS to perform title and registration lookups. Vision 21 may include a two-way interface with DPS, but there is no current statutory requirement to do so. The present RTS system has limited data fields and is not sufficient to enable a two-way DPS interface.

At present, TxDOT and DPS maintain separate key customer data identifiers, many of which contain similarities in name and description, for registration and title processing and for driver license processing. By using a central file containing key customer identifiers, the agencies can eliminate both the duplication of effort and reduce the potential for errors by inputting the data only once. There are numerous comparable primary key data elements in both systems. The replication of effort in inputting these identifiers plus the greater likelihood of data input errors increases the probability that a customer will have multiple slightly differing records in both systems. Significant reductions in data input effort and system maintenance expenditures could be realized through linking these data elements and functions.

The current requirement that each individual vehicle registration address be changed separately is expected to be corrected as part of the Vision 21 initiative. Multiple privately owned vehicles will be treated as a private fleet and the information for each

vehicle will be updated in their entirety when any vehicle address contained in the fleet is modified.

The new management information system to be developed under Vision 21 will also likely use a common Texas identifier, probably the Texas driver license number. This will allow the common customer approach to be more easily adopted over time, but additional cross-agency systems planning is required to ensure that this type of customer approach can be implemented in a reasonable time frame.

During the initial risk analysis, the ranking for this risk was **High**. In terms of materiality, the current approach impacts law enforcement's ability to easily obtain full information about a citizen's driver license and vehicle registration history. It also requires citizens to have multiple interactions with different state agencies or their agents in order to change their address or other identifying information, which creates an added burden to the citizens of the state. In addition, there are likely potential cost efficiencies in terms of not needing to process multiple transactions for activities such as address changes across different agencies.

In terms of likelihood of occurrence, this is an ongoing problem that could become more significant as the population of the state continues to grow. The Vision 21 initiative offers an opportunity to at least begin to develop a common customer strategy. However, given the multi-agency nature of the service delivery for driver licensing and vehicle registration in Texas, careful and highly coordinated cross-agency planning will be required to plan for and fully implement this type of solution. In addition, planning for this integration is likely to be complicated at least in the short to intermediate term by the requirements of the federal Real ID act and the focus of DPS' Driver License Division on ensuring implementation of these Real ID act requirements in Texas.

2. Limited integration between motor vehicle functions within TxDOT

In comparison with a number of other peer states (e.g., California, Florida, New York), there appears to be a limited synergy between the 'vehicular' functions within TxDOT. Each of these peer states have a department of motor vehicles or similarly named function (which also includes the driver license function housed in the Department of Public Safety in Texas) with senior leadership whose primary responsibility is ensuring guidance, direction, and coordination of the motor vehicle functions. These other states also typically have the International Registration Plan or interstate trucking program either as a separate unit within the Department of Motor Vehicles or as part of the Motor Carrier function.

In TxDOT, the Vehicle Title and Registration, Motor Carrier, and Motor Vehicle Divisions report in at the Deputy Director level. The Deputy Director, however, has a number of responsibilities beyond managing these motor vehicle services units as this position effectively serves as the chief operating officer of the department. As such, this position is not able to devote the time required to ensure that there is effective

cross coordination and shared strategic and business planning between the motor vehicle service functions. Likewise, coordination with the driver license function requires additional effort because it involves cross-agency planning and coordination with the Department of Public Safety.

There are some examples of integration between the motor vehicle services divisions within TxDOT. For example, VTR's IRP system pulls data from MCD's motor carrier credentialing system (MCCS), MCD's 1-800 number phone menu includes customer options for VTR and DPS, and VTR regional offices provide customers with motor carrier registration/permitting information and publications.

During the initial risk analysis, the audit team rated this risk as **High**. We believe the limited cross program coordination and planning between the motor vehicle functions is likely increasing the total cost of delivering these services. It is also limiting the department's ability to achieve future cost savings through creative program delivery and affecting the level of service it is able to provide in delivering motor vehicle services to its stakeholders.

3. Dependence on technology to implement critical business change

The three motor vehicle services divisions are clearly dependent on the timely and successful implementation of re-engineering and/or automation initiatives to be able to deliver critical business change needed to both improve service levels and achieve operational efficiencies. Examples include the dealer licensing application being implemented in MVD, the automated routing software being planned in MCD and the Vision 21 initiative in VTR.

It is critical that continued ongoing senior management attention and focus be paid to these initiatives in order to ensure that these initiatives are completed on time. The Texas Department of Information Resources and TxDOT's Information Resources Council have adopted a number of policies and procedures for managing and monitoring technology projects. TxDOT senior management should continue to closely monitor these efforts on a regular basis to ensure that the project scope is tightly managed and that intermediate deliverable dates are achieved, in order to ensure that projects are completed on time and on budget so that the department begins to achieve the targeted return on investment from these projects.

The rating for this risk is **High** due to the dependency of TxDOT upon these technology initiatives in order to obtain cost savings and provide improvements and flexibility in service delivery to stakeholders.

D. Audit Analysis Approach

To further study and analyze the risks included in this study area, the audit team established a technical working-group of stakeholders to provide guidance and input to the audit team.

The stakeholder team consisted of TxDOT management and staff responsible for managing the elements of the study area, together with outside stakeholder representatives. Those participants serving as members of the Motor Vehicle Synergies stakeholder group included:

- Gail Anderson, Legal Assistant Administration, MVD.
- Patricia Biddle, Investigator, Motor Carrier Operations, MCD.
- Christy Bird, Business Services Director, MCD.
- Luanne Caraway, Tax Assessor-Collector, County of Hays.
- Mary Ann Chapman, Branch Manager Vehicle Data Management, VTR.
- Molly Cost, Licensing Director, MVD.
- Michael Cuellar, Assistant Director Field Operations, VTR.
- Carol Davis, Director, MCD.
- Gerald James, Proprietor, James Brothers Auto Sales.
- Bobby Johnson, Director Headquarters Operations, VTR.
- Rebekah Lammey, Project Administrator Driver Responsibility Program, DPS.
- Victor Vandergriff, Director, VT Inc./Automotive Investment Group.

Our audit analysis approach, which was executed in conjunction with this stakeholder team, consisted of the following work steps:

1. Performing a detailed analysis of the current environment through follow-up interviews of TxDOT staff and industry stakeholders and documenting of the current process.
2. Conducting a review of best practices and lessons learned from other peer states.
3. Identifying various service delivery strategies and preparing a detailed analysis of each of the identified alternatives.
4. Conducting a detailed walkthrough of our findings and analysis with the stakeholders.
5. Documenting our specific recommendations based on this analysis.

Work in this study area involved conducting detailed interviews with 27 TxDOT staff and external stakeholders. Exhibit III-2 summarizes these interviews by role and function.

Exhibit III-2: TxDOT Interviews Conducted

Name	Role	Function
Gail Anderson	Legal Assistant Administration	MVD
Joe Barnard	Manager, Motor Carrier Operations	MCD

Name	Role	Function
Christy Bird	Business Services Director	MCD
Monica Blackwell	Chief of Titles operations Branch	VTR
Judy Brown	Chief, Driver License Division	DPS
Luanne Caraway	Tax Assessor-Collector	County of Hays
Mary Ann Chapman	Branch Manager, Vehicle Data Management	VTR
Molly Cost	Licensing Director	MVD
Gary Cox	Internal Auditor	VTR
Mike Craig	Deputy Director	VTR
Michael Cuellar	Assistant Director, Field Operations	VTR
Rebecca Davio	Director	VTR
Carol Davis	Director	MCD
Kirk Davenport	Manager, IFTA	Comptrollers Office
Ray Hutchinson	Section Manager, OS/OW Permit Section	MCD
Gerald James	Owner	James Brothers Auto Sales
Bobby Johnson	Director, Headquarters Operations	VTR
Jeff Kirk	Assistant Director, Field Operations	VTR
Linda Kirksey	Chief of Registration, Operations Branch	VTR
Harry Morgan	Director, Field Operations	VTR
Connie Noble	Lead Worker, OS/OW Permit Section	MCD
Bill Pool	Manager, Regional Office	VTR
Duane Pufpaff	Chief, Headquarters Operations	VTR
Scott Renouard	Director of Support Services	VTR
Alma Russell	Director of Motor Vehicles, Tax Assessor-Collector	Williamson County
Phillip Russell	Director	Texas Turnpike Authority Division
Robert Tanner	Director, Registration and Title Systems	VTR

E. Best Practices Survey of Other States

This section summarizes the best practices research of other states performed by the study team in this area. This best practices research was focused on two primary issues:

- Utilization of a common customer approach and synergy points between vehicle and driver programs.
- Organizational structures of motor vehicle services organizations.

Each of these areas is addressed below. This section then concludes with a brief discussion of a range of other best practices findings related to this study area.

1. Utilization of a common customer approach and synergy points between vehicle and driver programs

In the early stages of the audit of this study area, Dye Management Group, Inc. conducted a survey of several of the larger states to determine their views and experience regarding the synergies between vehicle programs and driver programs. Although these states had responsibilities covering both areas, we were interested to note that the majority of these states did not have direct links between their vehicle and driver systems. Only Ohio indicated that its relational database environment could easily provide both vehicle and driver information for a customer.

"Suspension of a driver's license is more effective than a court order," for compelling drivers to pay fines, says David Lewis, Deputy Registrar of the Massachusetts Registry of Motor Vehicles. In Massachusetts, a driver cannot renew his license if he has outstanding parking tickets or unpaid moving violations or if he owes excise tax on his automobile. Last year, the Massachusetts Registry collected more than $660 million in fees and fines; less than $600,000 came back as bounced checks, a whopping 0.1%. "How can you afford to stiff us?" Lewis asks rhetorically. "Whatever it is you have, we'll take it. We'll pull your driver's license. We'll take your title. We just don't have bad debt." Lewis pauses a moment to consider his words, then shrugs, his point made: At the Massachusetts Registry, "we walk a very fine line with incredible power over people."

"It's the most effective thing that you can do without throwing them in jail," says Peter Nunnenkamp, manager of driver programs at Oregon's Driver and Motor Vehicle Services. "And it's fairly cost-effective." In fact, it's so effective that Oregon has 109 different offenses that can result in the temporary suspension of a driver's license; 50 of them have nothing at all to do with driving. Increasingly, lawmakers around the country are employing that power to enforce public policies that have nothing to do with driving or motor vehicles. Lewis and his counterparts in other states aren't happy with the change, but there's little they can do when legislatures hand down new rules. "Every governmental agency is looking for every means possible to . . . enforce the regulations and policies in front of it," says Barry Goleman, President of AAMVANET, a computer network run by the American Association of Motor Vehicle Administrators that links together the computers of the United States' 51 motor vehicle agencies. And increasingly, says Goleman, those state agencies are

turning toward the DMVs as a source of data about the state's citizens, a way of providing services, and ultimately, a means of enforcing policy.[1]

Several states, including Massachusetts, Pennsylvania, and Virginia, are currently involved in major projects to reengineer their legacy motor vehicle systems. One of their goals is to operate in a customer-centric environment. This includes the creation of a common customer identifier across various programs, including drivers and vehicles. The benefits of this approach include the ability for the customer to receive a variety of services at the point of contact, whether that is at the counter, the call center, or on the Internet, and to be able to better manage customer accounts (for example, to refrain from providing refunds in one area when money is owed in another). In an environment such as Texas, where the driver and vehicle programs are administered by different agencies in different offices, the benefits may be smaller.

2. Organizational structures of motor vehicle services organizations

We also reviewed the organizational structures for motor vehicle services in several jurisdictions. While there are similarities between states, there is no obvious model or best practice to use as a guide. Each jurisdiction has its own culture and operating environment that is reflected in the way services are delivered.

One area that surfaced as a potential recommendation came from jurisdictions that have combined their handling of the IRP- and IFTA-apportioned programs within one area. States such as Indiana feel they gain efficiencies and improve customer service through their dual operations. They note that they employ one software package to run both systems.

3. Other best practices findings

Other best practices identified during the course of the motor vehicle synergies study include the following:

- The use of statutes as enabling legislation to define the broad purpose and key components, rather than the details such as processes and fees. These latter items are better suited to rulemaking or regulations, which can be amended more readily than attempting to change existing statutes. Several Canadian provinces use this approach. They also undertake regular reviews of legislative packages and enact ‘housekeeping’ bills.
- Reviews of fees are also conducted on a regular basis. Fees are set based on specific objectives, such as the following:
  - Cost recovery for the service that is provided.

[1] http://www.wired.com/wired/archive/2.02/dmv_pr.html

- Cost recovery, plus an additional margin (often for services provided by a third-party).
- A low or no cost fee to encourage use and participation (for example, an address change).

F. Analysis of Service Delivery Alternatives

This section summarizes the audit team's detailed analysis of the administrative, operating, and organizational environment in the motor vehicle service divisions within TxDOT to determine potential alternative approaches for motor vehicle synergies in the Department. These service delivery alternative models were evaluated against three primary factors:

- Opportunities to further assess the synergy of the motor vehicle services program areas with TxDOT's strategic direction.
- Opportunities for cost savings through an increase in shared functions across TxDOT's motor vehicle program areas, toll tag operations, and potentially with the Department of Public Safety.
- Potential for improvements in overall service delivery through a common view to the customer of Texas motor vehicle services.

In addition, the study was directed to respond to several research questions related to the following items:

- The administration of motor vehicle statutes.
- Consideration of the creation of a motor vehicles service portfolio within TxDOT.
- Evaluation of driver and vehicle functions being in the same agency.
- Implications of driver and vehicle functions operating within TxDOT.

The goal of our analysis was to assess which of the identified alternatives, options and approaches to enhancing functions would be the most beneficial to TxDOT and its customers. We have divided our analysis into the following four categories: Administrative Issues, Customer Synergies, Business Improvement Opportunities, and Organizational Synergies. Our analysis in regards to each of these areas is discussed in further detail below.

1. Administrative issues

Our review examined a number of areas relating to the operating environment within TxDOT and the motor vehicle services functions. This includes demographics, strategic direction, legislative environment, fees and commissions, and county tax assessor-collectors. Each of these areas is discussed in further detail below, followed by a summary of the key administrative issues.

a. Demographics

Texas is a state with one of the highest population growth rates within the country. According to the Texas State Demographer web site, over the next five years, the population will rise from an estimated 23.3 million in 2006 to 25.6 million in 2011, an increase of 2.3 million people. By 2040, the population will be at least twice as large as at the beginning of the century. The growth will be larger in metropolitan centers, and the rural share of the population will continue to decline, particularly in the panhandle and West Texas. The Hispanic percentage of the population, which today is around 35%, will reach the majority around 2026 to 2028. To summarize, the Texas population will be "ever-increasing, diverse, and older."

As can be seen from the projections, the current population growth of approximately one million every two years provides a problem for the government to be able to meet the needs of an expanding customer base, whose expectations for service are also increasing. One of the challenges is to find ways to provide services, and particularly administrative services like those provided by MCD, MVD, and VTR, in a more efficient and cost-effective manner.

b. Strategic direction

Strategic planning embracing long, medium and short term tactical action is an important component in the successful operation of an organization. 'TxDOT has a Plan' is the title of the department's strategic plan for 2007 – 2011, which through defined goals, strategies, tactics, and funding provides a stated direction for the Department. The published document describes each of the goals and strategies in the plan. However, there appears to be no mention of any specific action expected to be taken by MCD, MVD, or VTR. It is simply silent on providing direction for these three divisions within TxDOT.

Each of the three divisions has developed its own planning document covering both short and longer range activities. Apart from a mention of the department's mission, it is not surprising that these documents make no direct reference to TxDOT's Strategic Plan. It appears the main emphasis on planning between the department and the division is more short-term in focus and is mainly concerned with annual funding allocation issues and determining priorities for information technology resources. There are meetings and communication between the department's executive management and the division directors who review progress with current activities and discuss and approve future plans.

c. Legislative environment

The Texas Legislature operates on a bi-annual basis, which, with limited exceptions, only provides the opportunity for the majority of new or amended legislation to be enacted every two years.

Based on a review of existing legislative statutes relating to the operations of MCD, MVD and VTR and also a sample of bills (adopted or proposed) from the 2007 legislative session, we noted the following:

- Statutes can be very detailed and may define a specific process or action to be implemented, rather than enabling legislation that is broader and allows more flexibility in designing the business solution.
- Statutes are built one on another and often create a complex environment to understand, maintain, and change.
- The complexity adds to the cost of developing, delivering, and administering systems, particularly computerized processes.
- Fees and other such items are often defined in statute instead of within tables that are established through administrative rule.
- Much of the existing legislation has not been reviewed for many years. It often contains outdated practices, such as the use of 'black ink or typewriter' or requires a signature when current practices do not necessarily warrant it.

d. Fees and commissions

Similar to the environment with statutes, the fee structure is complex. While a fee study has recently been initiated by VTR, this is the first comprehensive fee review in more than 15 years. A comprehensive review of MVD fees has also not been conducted for more than 10 years.

In terms of vehicle registration, there are currently a multitude of fees. Even the basic private car has multiple options, including higher rates for newer vehicles. Fees associated with vehicle registration include items that vary by type and class of vehicle. Examples include a 30¢ reflectorization fee; diesel fee of 11% of the registration fee less the 30¢ reflectorization fee; soil conservation equipment allowing only one truck to be registered for 50% of the regular fee; and provisions for special industries, such as chili pepper growers and cotton vehicles. These latter registrations have special plates associated with them and a fixed expiration at the end of March each year.

Not only is the structure complex, it is difficult to explain to customers. A common response received during the study was "because it is in statute." A further issue is that, when compared with simpler solutions, complexity almost always costs more money to develop, administer, and manage. This is particularly true with computer based systems where each special situation has to be individually programmed. Where there are a large number of special situations, such as in vehicle registration, system maintenance and changes become more difficult and costly to implement.

There is little evidence that the fee structure and the fees themselves have been reviewed to determine their appropriateness and dollar level. Once again, using the

vehicle registration areas as an example, it can be seen most rates have either not been changed since inception or amended in recent years. An analysis developed by VTR in 2004, showed the majority of fees administered by the division had not changed for many years. Using the VTR analysis document as a basis, it suggests the majority of fees (28 of 52) have not changed in 20 years or more, while almost all (48 of 52) have remained static for over ten years.

In March 2007, VTR commissioned a fee study to be undertaken by outside consultants. The stated study objectives include the following:

- Uniformity of fees for similar services.
- Fees that cover the cost of providing the services.
- Fees that reflect the value of the product or service provided.
- Fees that induce the desired customer behavior.

This VTR fee study is expected to be completed near the end of 2007 and will recommend a comprehensive fee structure that is not specified in statute. In addition, the fee structure for MCD's oversize/overweight permits was reviewed and updated during the 80th legislative session by HB2093 which was recently signed into law.

e. County tax assessor-collector offices

Unlike MCD or MVD, VTR is heavily dependent upon a third-party partner for the delivery of major portions of its services to the customer. These are the county tax assessor-collectors, who through their offices handle and process most of the vehicle and registration transactions for the state. There is generally a good working relationship between the two parties. It is a mutually beneficial relationship through which, in conjunction with the registration transaction, the county collects significant fees for their own use. These include items such as road and bridge fees, optional child safety fee, voluntary young farmer loan guarantees, and limited service deputy assessor-collector fee.

The county tax assessor-collector receives compensation for processing the titles and registrations, although, like many other VTR fees, they have not been adjusted for many years. For many of the 254 counties, particularly those of small and medium population, it is possible that the fee received for handling VTR transactions does not fully covers the county's cost of providing that service.

The working relationship is partially defined in statute. However, considering the significance of the relationship between both parties, it is unusual that there is not a formal contract, agreement, or memorandum of understanding. The audit team believes that this may become more important in the future with the likely delivery of more services performed via the Internet or other technologies. Greater use of the Internet and/or other technologies as an alternative delivery channel will increase the potential of transaction processing that bypasses the county offices. This issue is

addressed in greater detail in the "Using Technology to Enhance Vehicle Titling and Registration" study area of this audit (please refer to Chapter IV of this report).

The absence of an agreement is also a service issue today. VTR has developed an Internet-based registration renewal that functions as a data collection application. The renewal is still processed however by each local county office. The Internet renewal provides the customer with another service delivery choice and offers the convenience of 24/7 service. Unfortunately, it is only available in 144 of the 254 counties. Each county has been allowed to make the decision whether it wished to provide the service via the Internet. The result is that residents in many, mainly rural counties are denied access to a service improvement that is designed to be used statewide.

f. Administrative environment summary

Texas population growth will provide challenges to maintain service levels. However, the expectation is that service will continue to be improved, but budgets will not grow at the same pace as the growth in the number of customers.

The Department's strategic direction and focus appears to be largely directed toward those divisions whose operations are infrastructure-related. There is little in the current strategic plan that refers to MCD, MVD, or VTR.

The divisions operate in a complex, inflexible environment with statutes directing day-to-day operations in an unusually detailed manner. The complexity is further exacerbated in VTR by vehicle classifications and fee structures that are difficult to explain. Neither the statutes nor the fees have been subjected to a comprehensive review for many years.

Also in VTR, we were surprised to note there is no formal service level agreement with the county tax assessor-collectors who are the major service delivery partner for the division.

2. Customer synergies

This subsection discusses issues surrounding customer synergies, including the importance of having a customer focus and the value of a common customer approach. Each of these are discussed below, followed by a brief summary of the customer synergy issues.

a. Customer focus

Each of the three motor vehicle services functions (MCD, MVD, and VTR) has a customer focus in their operations. However, their primary customers are different. MCD concentrates their operations on services to motor carriers, MVD has a focus on services to vehicle dealers, and VTR largely deals with vehicle owners. Consequently,

there is not a large amount of synergy or overlap between the three divisions regarding customers, although there are some links or potential links between programs. These include the following:

- The IRP (International Registration Plan) operated by VTR accesses the motor carrier database at MCD to ensure the carrier has insurance on their vehicle fleet.
- The oversize/overweight permit program at MCD has no direct link with the registration system at VTR. On infrequent occasions, MCD will phone VTR to check plate details.
- The Temporary Tag Program at MVD is a starting point for vehicle registration, although currently there is no link to VTR systems. Legislation adopted in the last session of the Texas Legislature requires development of a system that will provide an electronic link from the dealer to VTR. It is not clear if VTR will be checking MVD data to ensure the dealer is properly licensed before a temporary tag is issued.

TxTag, the toll administration system of the Turnpike Authority Division within TxDOT, has operational links to VTR. While much of the tolls that are collected are through the TxTag system, a portion is also collected by electronically reading the license plates of vehicles using the toll roads that are not registered with the toll authority. VTR has a link with TxTag to provide access to name and address details for the billing of vehicle owners using the toll roads. TxTag would also like to be able to collect overdue toll charges from the vehicle owner at registration time.

b. Common customer

One of the unusual weaknesses of the current RTS (Registration and Titling System) at VTR is the inability to link multiple vehicles to a single owner. If a VTR customer owns three vehicles, there will be three distinct records in the RTS database, each with its own name and address details. There is currently no automated method to link these records and provide a common customer record for vehicle owners.

VTR, as part of its project to replace the RTS legacy system, is considering using the driver license number as the vehicle owner identifier. This use of a common customer number, together with a standard name and address, is becoming more prevalent in a number of states, particularly those where the responsibility for both programs is with the same agency. In Texas, where the two programs are operated by different departments, the benefits may not be so obvious.

However, there is a large correlation with the two databases. The majority of vehicle drivers are also vehicle owners, although this latter group also includes companies, governments, and other organizations that are clearly not drivers.

We noted two issues relating to the federal Real ID driver license program that need to be taken into consideration if the program is implemented for driver licenses. Real ID requires legal presence to be verified before a driver license can be issued under the

program, while it is not a requirement for vehicle registration. If an individual is denied a vehicle registration, what will be the implication for vehicle ownership? It also appears that Real ID may require a visit to a 'secure' driver license office to make an amendment, such as an address change. If drivers and vehicles share a common address record, the procedure for changing the data could become more complex and could lead to slower updating of vehicle owner addresses than under the current system.

c. Customer synergies summary

MCD, MVD, and VTR each have their own sets of customers: motor carriers, vehicle dealers, and vehicle owners, respectively. There is currently limited synergy between the divisions, with the possible exception of the IRP program. Arguably, there is more commonality of customers between the vehicle owners at VTR and the vehicle drivers served by the Department of Public Safety (DPS).

3. Business improvement opportunities

While reviewing the synergies within and between the three motor vehicle services functions, we noted a number of projects, either proposed or under development, whose impact will need to be taken into consideration when determining future organizational structures. Each division has a major systems development project underway. In MVD the first phase of implementation has recently occurred for a system that covers a wide range of the division's activities. MCD is about to commence development of an Internet accessible permit routing system, while VTR is developing business plans related to the reengineering of the registration and title system. These and other identified business improvement opportunities are reviewed in this section, followed by a brief summary of the various business improvement opportunities.

a. VTR –Vision 21

Vision 21 is a significant multi-year undertaking to replace the division's legacy systems and reengineer business practices to embrace current technology and business solutions. It has many system components, some of which are outlined later in this section. Among the key attributes of the proposed system are the following:

- Online, real-time updating where practical.
- An emphasis on 24/7 services provided over the Internet.
- Improved quality of data through greater editing and validation at the source of data entry.
- Interfaces with a wider range of national and state systems and databases.
- Improved access to information and ad hoc reporting.

- The ability to more efficiently respond to changes and make enhancements.

The concepts of the system have been discussed over the past several years. It is presently still in the early stages of development. Current activities are involved in defining the project scope in greater detail and finalizing a business case for Vision 21.

b. VTR - electronic lien and titling

The current titling system in Texas is both paper- and labor-intensive. There is a movement by an increasing number of states, such as Kansas and South Carolina, to transition to a system where the formal title record is held in an electronic record rather than a paper one. There are several benefits to the system, particularly to VTR stakeholders such as vehicle dealers and financial institutions.

Depending on how the system is implemented, there is potential to realize staff savings from electronic lien and titling (ELT). These are likely to come from two sources. The first source will be staff reductions at the VTR offices in Austin who are involved in the printing, distribution, filing and accessing of the titles through microfilm and digital image systems. The second source will be staff reductions at the 16 VTR Regional Offices across the state, which will likely no longer be processing certified copies of titles, which compose the highest volume of transactions handled at these offices.

We are not aware of any jurisdictional study that includes a detailed estimate of staff savings or other financial benefits accruing from the implementation of ELT. A very preliminary analysis suggests staff savings in the range of 30 positions by the second full year of implementation, with the majority coming from Regional Offices. Taking the 30 positions at an average FTE cost (salary, benefits, and overhead) estimated at $40,000 per annum, represents savings of $1.2 million. In addition, savings gained from eliminating the use of special, secure paper, could generate an additional $1 million in savings per year. An unknown factor to be considered is the income (revenue less expenses) from fees received for issuing certified or other title copies.

ELT is identified as a function that will be implemented during the Vision 21 project development. ELT should be implemented as soon as possible using the current RTS system as a processing base. We also understand ELT does not require legislative change since TRC 501.117 provides the authority to proceed.

c. VTR - dealer registration and titling

Currently the only dealer based system installed by VTR is the Dealer Title Application (DTA) which allows approved dealers in only 31 counties to enter titling and registration data onto a disk. The disk is forwarded to their county office for processing. Some dealers also have the ability to print the registration tag at their location. Vision 21 is envisioned to provide an Internet link from the dealer to VTR's system, thereby removing the county offices from processing the transaction. This

approach, however, will require a change in statute. Section 501.023 of the Transportation Code requires that title transactions involve county tax assessor-collectors and does not allow VTR to have a direct relationship with the dealers.

Many states have dealer systems electronically linked to their main processing center. In most cases, the systems are supplied and maintained by third-party suppliers, who charge their fees to the dealer, rather than the state. Participation by the dealers varies from state to state, with some of the highest usage rates in South Carolina and Florida at over 60%.

Implementing a similar dealer titling and registration system in Texas will improve service for the vehicle dealers. Depending on how it is implemented, it also has the potential to reduce VTR processing costs by eliminating the $1.90 fee currently paid for each transaction processed at the county office.

While the dealer application is identified as a component of Vision 21, based on the experience of other states, it should be implemented using the current RTS system and the modules later amended to operate under Vision 21.

d. VTR and MVD - Temporary Tag Program

The present temporary tag system is administered by MVD, which is limited by statute to defining the design of the card. There is no automated or manual link to the registration system. As documented in a recent report by the Texas Transportation Institute, the current system is open to abuse and fraud and also results in a loss of revenue to state and local governments.

Many of the states with Temporary Tag Programs (nine states do not utilize temporary tags) have reduced their losses by adding security features to the tags making them more difficult to alter or copy. Colorado estimated that it received an additional $11 million in revenue in the first full year after making its tags more secure. Based on population differences, this could theoretically mean additional revenue in the range of at least $25 million for Texas.

In recent years, a number of states have moved to temporary tag systems whereby the validity of the tag identification can be verified with the registration authority. This is the approach adopted by the legislation that was passed in the last session of the Texas Legislature. It will move all or portions of the program from MVD to VTR. The Temporary Tag Program could then be integrated into a dealer titling and registration system.

e. VTR - common vehicle identifier

Vehicles in Texas carry a number of identifiers for various purposes, including the following:

- License plates at the front and rear of most vehicles for law enforcement and other identification purposes.
- A registration sticker on the windshield to indicate the month and year that the registration term expires.
- An inspection sticker on the windshield which also shows month and year, but relates to the expiration of the inspection term. This may be a different date than the registration expiration.
- An optional TxTag to recognize the vehicle when proceeding through the lanes equipped with automated readers on Texas toll roads.

While Texas has multiple identification tags and stickers, many jurisdictions are looking at ways of reducing or eliminating them. It is not unusual for the registration and inspection programs to have the same expiration date and consequently, with an integrated system, to use one common sticker or tag. For some years, Quebec has eliminated the use of a sticker altogether, and recently, New Jersey has followed suit. It is understood that law enforcement in both jurisdictions has direct access to up-to-date vehicle records.

Texas, along with other jurisdictions, has looked at and is monitoring the future use of RFID (Radio Frequency Identification) technology to be integrated into vehicle license plates. In theory, the use of such plates would be read electronically and link to registration, inspection or toll payment systems. Law enforcement will also be able to access the information electronically and have less need for windshield or other stickers.

f. VTR -single license plate

On several occasions, consideration has been given by VTR and legislators to remove the front license plate and become a single license plate jurisdiction. In Texas, as in other states that have considered the move, opposition from law enforcement has been the primary issue for not making the change.

VTR estimates the annual savings from moving to a single license plate at a little over $2 million each year.

g. MCD – oversize/overweight permits

Development is about to commence on the Texas Permit Routing Optimization System (TxPROS), which will allow oversize and overweight permits be routed automatically over the Internet. The system and its benefits are described in some detail within Chapter II of this report. The benefits include significant staff savings once full implementation and institutionalization is realized.

h. MVD – case management and administration

The first phase of implementation of the LACE (Licensing, Administration, Consumer Affairs, and Enforcement) system was rolled out on May 1, 2007. It is designed to improve case management administration. The next phase, due to be implemented in 2008, will automate dealer licensing through an Internet-based solution.

i. Internet-based applications

The three divisions provide services or intend to provide Internet access to their customers. Their rationale for doing so is the same: namely, to provide improved service and convenience and also to reduce operating costs. Their current status is as follows:

- MCD has been the most aggressive in its implementation. The motor carrier credentialing (CPS) application is used by the majority of truckers within the state and has been well received. The division is about to commence development of the Internet-based permit routing system.
- MVD has no Internet-based systems in operation. However, the LACE system is in the first phase of implementation and expects to develop and install an Internet-based licensing system for vehicle dealers in 2008.
- VTR has implemented registration renewals and address changes via the Internet, although the system simply collects transaction data for subsequent validation and final processing by county offices. Recently, VTR implemented an Internet application for IRP transactions. It has been well received and is used by many of the larger carriers in the state.

As part of the Consumer Services audit, Dye Management Group, Inc. conducted a study into the increased use of the Internet and other technologies by VTR. The audit team identified a significant number of potential applications that could be implemented, including registration renewals and dealer titling and registration processes. Both of these applications would include automated processing by the VTR system, thereby eliminating transaction processing in the county offices. It is projected that 25% of all registrations could be Internet-based within a few years of implementation and could realize significant annual savings to the state from reduced fees paid to county offices. Implementation of these applications, however, will require statutory changes to redefine the relationship between VTR and its county tax assessor-collector partners. Our findings and recommendations in this regard are described in Chapter IV of this report.

j. System development funding

The vehicle registration fee includes a $1.00 charge on every vehicle processed by a county whose vehicle population is over 50,000. In other words, it is funded by vehicle owners residing in the urban centers, while those in smaller centers and rural

areas do not contribute. The fund is designed to pay for improvements to VTR's systems in the following areas:

- "Enhancing the department's automated registration and title system."
- "Providing for automated on-site production of registration insignia."
- "Providing for automated on-premises and off-premises self-service registration."

Currently the fund contains a balance in excess of $50 million. Approximately $16 million is expected to be generated for the fund during fiscal year 2007.

k. Business improvement opportunities summary

There are a number of business improvement opportunities that could be implemented over the next few years. Many have potential for significant revenue gains or cost savings. Based on order-of magnitude estimates, those affecting VTR include the following:

- Savings from staff reductions as a result of the implementation of ELT and the elimination of special security paper for current titling operations would total $2.2 million each year.
- Increased registration revenue realized by employing a more secure Temporary Tag Program and an electronic link to VTR. Additional revenue from this initiative has been estimated in the range of $25 million annually.
- Savings from moving to a single license plate system for most vehicles would generate over $2 million in savings each year.
- Reducing county assessor compensation by 25% due to transactions being processed over the Internet at VTR rather than the county offices would generate an estimated $1 million yearly.

4. Organizational synergies

The audit team evaluated various organizational models during our analysis of potential synergies between the various motor vehicle services functions. In this subsection, we have highlighted some areas where organization change within TxDOT divisions may be appropriate. We have also examined the synergies existing between TxDOT's motor services divisions and other areas of Texas state government.

a. Organizational models

Our analysis assessed five organizational models to determine their impact to TxDOT operations. The goal of these models was to provide an analysis framework to help the study team to assess which alternative approaches or blends of approaches could

potentially improve organizational synergies. Our findings in regards to each of these models are discussed in further detail below.

- **Status quo model**. We reviewed the current composition of the organizational structure in each of the motor vehicle services divisions to assess whether each of the functional activities was appropriately positioned or whether it was more suited to another division within TxDOT or another state agency.
- **Carrier functional consolidation**. We considered the approach of one-stop-shopping for motor carriers and whether carrier-based programs in other divisions should be consolidated into the Motor Carrier Division.
- **Consolidating the three motor vehicle services divisions**. We examined two possible options using this model: whether to merge the three divisions into one division or to maintain the separate divisions under a common administrative responsibility.
- **A virtual department**. This approach uses technology, particularly the Internet, as a significant service delivery channel and a strategic focus to improve customer service and lower administrative costs.
- **A single service point**. This approach combines multiple customer service channels in a common service point, for example, providing a variety of government services such as vehicle registration, driver licenses, fishing licenses, and other registries on a one-stop-shopping basis with offices throughout the state.

b. Other Texas state agencies

The study also considered opportunities for improving synergy with other areas of Texas state government. We also evaluated the organization of similar functions in other states to determine their relevance to Texas.

The majority of states operate with vehicle registration and driver licensing in the same agency. This includes most of the larger states, including California, New York, Florida, Ohio, and Virginia. However, Texas is not alone in operating the two functions within two separate agencies. Utah, Tennessee, and Mississippi are examples of states where driving and vehicle programs are delivered by different state departments.

There is no consistent location within government for motor vehicle agencies, although it is interesting to note that in three of the larger states, they operate as separate, stand-alone government departments. Some examples of the various solutions in placing motor vehicles agencies within government are listed below:

- Department of Transportation: Arizona, Pennsylvania, North Carolina, Oregon
- Department of Safety: Ohio, Florida

- Department of Justice: Montana
- Department of Licensing: Washington
- Department of Revenue: Georgia, Kansas
- Secretary of State: Michigan, Illinois
- Stand-alone: California, New York, Virginia

c. Opportunities within TxDOT

In evaluating the organizational structures and program responsibilities within TxDOT, we noted a few potential anomalies and areas where a change to a different division could be made. They include the following:

- As it is part of the vehicle registration cycle, TxDOT should consider moving the Temporary Tag Program from MVD to VTR. This would include the new -based temporary tag system which VTR has been directed to develop by the Legislature and any underlying business processes related to the administration of the registration functions associated with the Temporary Tag Program. This transition of responsibilities will allow TxDOT to most effectively implement the requirements of SB11 and SB1786.
- As it is a licensing program, TxDOT could transfer the salvage dealer licensing function from VTR to MVD. Alternatively, the salvage dealer program could be shifted from VTR to DPS, who currently has the enforcement responsibility. Another option could be a shift of both the licensing and enforcement responsibilities from VTR and DPS to the Texas Department of Licensing and Regulation (TDLR). This would be similar to the shift of licensing and enforcement responsibilities for tow truck operators and vehicle storage facilities from MCD to TDLR, effective January 1, 2008.
- The International Registration Plan (IRP) is both a vehicle registration function and a motor carrier program. Therefore, consideration could be given to moving IRP from VTR to MCD.

We also noted that the TxTag program for toll roads is an administrative and revenue collecting function and, like vehicle registration, is concerned with charging for road usage. As a result, there is the potential for synergy in aligning the toll tag operations component of the Turnpike Authority with VTR or as a separate unit reporting into an integrated motor vehicle services function. This would also promote additional collaboration in terms of developing a new common vehicle identifier.

d. Texas Department of Public Safety

Our audit scope included conducting discussions with DPS, and in particular, the driver licensing function to determine the potential synergies between driver and vehicle programs. We noted the following:

- There are opportunities for synergies between the vehicle registration and driver licensing systems in terms of a common customer approach. There are, however, currently some challenges in achieving greater synergy between the driver licensing programs in DPS and the vehicle programs at TxDOT, given the driver licensing program's focus on implementation of the federally mandated Real ID requirements.
- Driver licensing does obtain vehicle information from VTR relating to the upkeep of the state's accident reporting system. This program will be moving to the Traffic Division in TxDOT in the near future.
- The vehicle inspection program at DPS has potential links to VTR's registration system. DPS is planning to develop an Internet connection to the vehicle inspection stations and may build a vehicle data base containing inspection details, which could be integrated with VTR's database. As noted earlier, both programs produce a windshield sticker but with differing expiration days.
- The Texas Highway Patrol at DPS, as well as other law enforcement agencies, use VTR registration and title data.

e. Comptroller of Public Accounts – IRP and IFTA

We also noted the similarities that exist with the International Registration Plan (IRP) at VTR and the International Fuel Tax Agreement (IFTA) program operated by the Texas Comptroller of Public Accounts. Both programs share a common customer with interstate motor carriers and use similar data to apportion costs to jurisdictions who are members of the organizations. Several states operate both programs within the same organizational entity.

f. Organizational synergies summary

Our review of the organizational structure of the motor vehicle services functions within TxDOT indicates some untapped synergies between the operating areas. While there are not necessarily major changes required, there appears to be some small shifts in program locations that may be appropriate.

There are also some synergies between the driver licensing function at DPS and the vehicle registration system in VTR, though timing may be an issue in addressing these due to the impact of implementing Real ID. There are potential business connections with law enforcement and the Vehicle Inspection Division at DPS.

A further potential synergy opportunity may exist between the IRP program in VTR and the IFTA program in the Comptroller of Public Accounts office.

G. Key Findings

Based on our review of operational statistics, our survey of peer states, discussions with TxDOT staff and stakeholders, and our review of various alternatives, this section summarizes our key findings in regards to synergy opportunities between the various motor vehicle functions. These key findings include the following:

1. Texas is a fast-growing state

- Population growth outpaces the nation. The number of customers, private and commercial vehicles, and transactions are all expected to increase each year into the foreseeable future.
- State budgets and staffing levels for administrative services are not expected to keep pace with growth.
- Customer demands and expectations for improved service will continue. As new technologies offer opportunities for different services solutions, government will be expected to utilize them.

2. Motor vehicle divisions operate largely within their own silos

- The motor vehicle services functions within TxDOT operate within the department with great autonomy. While the Appropriations Act and division level planning documents and output measures provide some strategic direction to these functions, the department's published strategic plan concentrates on infrastructure-related activities and provides limited direction to the motor vehicle services functions.
- The three divisions (MCD, MVD, and VTR) operate and administer their responsibilities with little direct involvement between each other. The main synergy seems to be that their programs are related to road vehicles. MCD concentrates on carriers and commercial vehicle operations, MVD is heavily oriented toward vehicle dealers, and VTR activities revolve around the vehicle owner.
- There appears to be potential value in a closer relationship between the TxTag electronic tolling program and VTR.

3. There are few common customers between the divisions

- As their programs are directed to specific groups of customers, there is limited commonality between the groups of motor carriers, vehicle dealers, and vehicle owners.

- The largest potential synergy area is between vehicle owners and toll users. If a TxTag is not used, the license plate is used to identify the customer and VTR's registration system supplies the data to toll administration.

4. The motor vehicle services divisions operate in an unnecessarily complex environment

- The legislative environment is complex with statutes often defining operations and processes in detail. The statutes often build one on another and lead to complex operations. This detail has to be built into automated systems, and this adds to the costs of system development and maintenance.
- Statutes can have outdated practices defined within them. Many have not been reviewed or updated for a significant period of time.

5. There are multiple vehicle identifiers

- Different windshield stickers are used for proof of registration, proof of passed inspection, and a toll tag reader.
- Front and rear vehicle license plates are also required to be displayed on most vehicles.
- There have been no discussions or plans to consolidate the number of identifiers displayed on a vehicle.

6. There are many potential business improvement programs identified

- Each of the three divisions has major projects under development or identified.
- VTR has a very large, enterprise scale project planned in Vision 21. A business case and strategy for development is required to be completed. It appears that most business improvements will be developed in conjunction with Vision 21, which will take several years to implement.

7. There are potential synergies between TxDOT motor vehicle services functions and various DPS programs

- The DPS driver licensing operations would like to use the vehicle registration system in the future to assist in the collection of overdue fines from its driver responsibility program.
- There is potential for linkages between other DPS programs and TxDOT motor vehicle services functions. One relates to the Vehicle Inspection Division and possible links or amalgamation of windshield stickers. The other area concerns the access to various databases for DPS and other law enforcement agencies.

8. There are few best practices relating to motor vehicle organizational structures

- Most large states have both driver and vehicle services under one motor vehicle agency. But Texas is not alone in having its operations spread over more than one department.
- There are many variations in the organizational structures employed by the states. No specific model office is identified as the preferred structure for motor vehicle operations. Much depends on the organization and culture of the specific state government itself.

H. Recommendations

This section presents our go-forward recommendations for achieving additional synergies between the various motor vehicle programs within TxDOT and other state agencies. These recommendations were developed based upon evaluation criteria established during the Risk Analysis phase of the audit. Each recommendation was appraised against a set of criteria that indicated its impact to TxDOT's mission, scope, and function as well as the impact to its customers and partners.

Exhibit III-3 summarizes these recommendations and presents the suggested timelines for implementing the various recommendations. For ease of presentation, we have grouped our recommendations into the following categories: strategic direction and planning, reducing complexities, common identifiers, organizational opportunities, and business improvement opportunities. Each of these categories is discussed in more detail below.

Exhibit III-3: MV Synergies Recommendations Timeline Chart

Recommendation	Within 12 months	Within 24 months
Appoint assistant executive director for Motor Vehicle Services	✓	
Develop strategies and plans for the Motor Vehicle Services areas and for the individual divisions	✓	
Expand the ability to use RTS improvement funds across all motor vehicle service divisions	✓ - Research	✓ - Amend statute
Renegotiate Internet use contract with TxOnline	✓	✓ - Seek statutory changes or program waiver if appropriate
VTR to negotiate a service level agreement with county tax assessor-collectors	✓	✓ - Seek statutory changes as required to implement

Recommendation	Within 12 months	Within 24 months
Conduct a review of statutes to streamline and simplify	✓- Research and identify changes	✓- Amend statutes to allow modifications by administrative rule
Conduct a review of fees	✓	✓ - Amend statutes to allow fees to be set by administrative rule
VTR to conduct a vehicle classification review	✓	✓ - Amend statutes to allow modifications to be set by administrative rule
Establish name and address conventions	✓ - Recommend	✓ - Begin implementing
Multiple vehicles linked to owner		✓ - Begin implementing as part of Vision 21
Determine validity of common identifier for vehicle owner and driver license	✓	
Develop strategy for a common vehicle identifier	✓	✓- Commence development
Temporary tag program to VTR	✓	
Salvage dealer licensing to DPS	✓ - Discuss with DPS	✓ - Seek statutory change
Vehicle storage facility licensing to TDLR	✓	
Evaluate the move of IFTA to VTR	✓- Discuss with Comptroller of Public Accounts	✓- Seek appropriate statutory changes
Move disabled parking placard to driver licensing at DPS	✓- Discuss with DPS	✓- Seek statutory changes & implement
Develop and implement TxPROS	✓- Ongoing	
Implement electronic lien and titling	✓- Study	✓- Implement
Implement dealer registration and titling	✓- Study	✓- Implement
Implement Temporary Tag Program	✓- Ongoing	
License plate-to-owner	✓- Discuss with DPS and other law enforcement agencies	✓- Amend statute and implement

1. Strategic direction and planning

The study team's recommendations in terms of strategic direction and planning include the following:

- Appointing an assistant executive director with responsibility for the motor vehicle portfolio.
- Developing business strategies and plans for the motor vehicle portfolio.
- Requesting statutory change to allow the RTS Improvement fund to be utilized for the benefit of all motor vehicle program areas.
- Renegotiating the Internet service contract with the Department of Information Resources TxOnline.
- Developing and negotiating a service agreement with the county assessor-collectors.

a. Appointing an assistant executive director with responsibility for the motor vehicle portfolio

Dye Management Group, Inc. recommends that TxDOT appoint an assistant executive director with responsibility for the motor vehicle services functions within TxDOT. Traditionally, these comprise Motor Carrier Division, Motor Vehicle Division, and Vehicle Titles and Registration Division. We believe TxTag and the toll collection operations functions belong within this group. Toll administration is an administrative function, and rather than being focused on infrastructure, its customers are the vehicle owners and motor carriers operating in the state; and its purpose in collecting revenue for road use has synergy with vehicle registration programs. With the potential for applying global positioning systems (GPS) and other advancements in vehicle identification technology, this relationship may well grow closer in the future.

The Assistant Executive Director will help to ensure that the motor vehicle divisions are an integral part of the Department's strategies and plans. This position will also lead an integrated strategic planning effort among the various motor vehicle services functions.

The study team reached this recommendation for organizing the motor vehicle services functions within TxDOT under an Assistant Executive Director position after analyzing several different organizational alternatives. These alternatives included, among others, maintaining the status quo, merging the three existing TxDOT motor vehicle service functions into a single division within TxDOT, creating a separate state-level department of motor vehicles including the driver license and vehicle inspection functions within DPS, and creating a virtual department linking TxDOT and other agencies motor vehicle services functions through one or more common customer portals. We found that providing a point of coordination through a single executive responsible for motor vehicle services functions at TxDOT provided the

benefits of an executive level resource dedicated to motor vehicle services, improved business planning among the various functions, some potential for additional economies of scale, and a clear executive level point-of-contact within TxDOT for motor vehicle services opportunities with other agencies, while still recognizing and preserving the unique missions and different customer bases of each of the existing motor vehicle services functions within TxDOT.

The study team understands that there are some concerns within TxDOT about the impact of this recommendation. One area of concern is the shifting of TxTag into the new umbrella motor vehicle services organization. Issues in this regard include the level of integration and existing linkages between TxTag and its customer service center and toll collections and toll operations, the potential impact on relationships between TxTag and other toll authorities in Texas, and any potential concerns on the part of bond holders. These concerns will require additional discussion and coordination with the Turnpike Authority prior to the full implementation of this recommendation.

b. Developing business strategies and plans for the motor vehicle portfolio

Dye Management Group, Inc. recommends TxDOT develop an integrated strategic and business plan for the motor vehicle portfolio. The responsibilities of the assistant executive director will include involvement in the strategic development of the department and ensuring that the motor vehicle services functions form an integral part of TxDOT's focus. In turn, the divisions will work together to coordinate and develop their business plans in support of the department's direction.

In particular, VTR's business strategies and plans should incorporate Vision 21's strategy, plan and initiatives; items for development on a modular basis under RTS for future operation as part of Vision 21; and an Internet strategy.

c. Requesting statutory change to allow the RTS Improvement Fund to be utilized for the benefit of all motor vehicle program areas

TxDOT should request from the Texas Legislature statutory authority to utilize the RTS Improvement Fund for the benefit of all motor vehicle services functions. The fund contains approximately $50 million and has the potential to collect over $15 million each year. Part of the motor vehicle services functions' business plan should be to develop a strategy based on a consensus of priorities for the best use of these systems' improvement funds across all its operations, rather than the exclusive use of the replacement of the RTS system in VTR.

d. Renegotiating the Internet service contract with TxOnline

TxDOT should seek statutory authority, if required, to review and renegotiate the Internet service contract with TxOnline. The growth of low cost, customer convenient,

Internet-based services will be a key delivery channel for the growing population of Texas. With the expansion of VTR Internet use, the expected volume of transactions processed by the motor vehicle services functions will total several million each year. These will produce economies of scale that should be exploited by the divisions and the department. An estimate of the cost of operating an independent Internet portal should be developed and used to negotiate reasonable fees from TxOnline and its contractors. If no agreement can be reached, alternatives should be evaluated, including ways to obtain a waiver from TxOnline (as MCD has been able to do with the use of proprietary debit cards by motor carrier and permitting customers) or requesting specific statutory relief from the Texas Legislature based on the tremendous potential savings for the state.

e. Developing and negotiating a service level agreement with the county tax assessor-collectors

VTR should develop and negotiate a service level agreement with county tax assessor-collectors. Such an agreement would supplement the relationship as it is identified in statute and would provide the day-to-day operational guidelines for interaction between VTR and its county partners. This service level agreement would include the commitment to provide services; monetary arrangements as identified through the revised revenue sharing model reflecting functions which may bypass county offices via the Internet and other contract provisions.

VTR is highly dependent upon the county offices as its major customer contact point and delivery channel for vehicle and registration titling services. Even with increased future Internet use, the majority of transactions will still be handled at the county offices for many years to come. It is a strategic partnership for the counties and VTR, and the lack of a formal agreement has high risk potential for both parties. The agreement should incorporate items such as service expectations (including the provision of Internet services statewide); compensation; audit and non-performance; and commitment to involve and communicate in future service delivery plans and development.

2. Reducing complexities

The study team's recommendations in terms of steps to reduce the overall complexity of the motor vehicle services business environment include the following actions:

- Review statutes to streamline and simplify to the maximum extent possible.
- Review and update the fee structures and levels.
- Conduct a vehicle classification review.

a. Review statutes to streamline and simplify to the maximum extent possible

Dye Management Group, inc. recommends that a multi-division project be established to undertake a comprehensive evaluation of the current statutes. This project should be designed to accomplish the following:

- The replacement of the detail of processes, the level of fees, and other descriptives in current statutes with proposed enabling legislation, which simply defines the purpose of the statute and the critical items associated with it.
- Replacing the detailed legislative requirements with administrative rulemaking, fee tables, and other schedules so while their amendment will require legislative approval, it will provide improved flexibility and reduce both administrative and legislative effort.
- Update and consolidate the legislation during the review by removing outdated practices. This should also include preparing for the increased use of high convenience/low administrative cost services, such as those provided via the Internet (for example, by reviewing requirements for hand-written signatures and physical office visits and eliminating or replacing them with more convenient alternatives).
- Working with legislators and legislative staffers to gain acceptance for the use of enabling legislation, in conjunction with administrative rulemaking, as the preferred approach for the establishing program rules and regulations.

When the above has been accomplished, an omnibus bill or bills for the next legislative session should be developed to implement the results of the statute review and simplification process.

b. Review and update the fee structures and levels

In conjunction with the statute review, Dye Management Group, Inc. recommends that TxDOT conduct a similar review of the fees administered by each division to determine the following:

- The validity of each fee and whether it should exist as a separate fee or be merged into another.
- Whether the fee should be set on the basis of cost recovery, cost recovery plus, deterrent fee (such as a fine), or at no cost to the customer.
- Whether there is benefit to making a provision for fee rate changes on a regular time frame to cover inflationary movements in costs.

Those fees that are subject to legislative approval should be grouped, as appropriate, into fee tables and wherever practical be able to be amended through administrative rulemaking. (It is noted that VTR has recently commenced a fee review and that MCD fees were reviewed and updated by the passage of HB2093).

c. Conduct a vehicle classification review

Dye Management Group, Inc. recommends that VTR also undertake a review of the vehicle classification structure used within the vehicle registration process. It should be designed to simplify the structure and ensure the rationale for the breakdown of vehicles into classes and sub-classes that is relevant in today's environment and can be logically explained to customers. The fees associated with the vehicle classification should be developed using the same principles as the fee review outlined earlier in this section.

3. Common identifier

The study team's recommendations in terms of establishing a common identifier include the following actions:

- Establishing name and address conventions.
- Accelerating the project to link multiple vehicles to their owner.
- Determining whether a common identifier for vehicle owners and drivers is practical.
- Developing a strategy for a common vehicle identifier.

a. Establishing name and address conventions

Dye Management Group, Inc. recommends that the motor vehicle services functions work together to develop common standards for recording name and address details in databases. These should include fixed format fields for name details and address details. The addresses should be edited prior to acceptance using commercially available address editing software. Implementation will take place as opportunities emerge, such as Vision 21 in VTR.

It may be appropriate for a division to take the leadership position in this development with regard to specific databases. (For example: MCD with motor carriers; MVD with vehicle dealers; and VTR with vehicle owners).

b. Accelerating the project to link multiple vehicles to their owner

The current RTS system is unusual in having multiple name and address records for a single given customer. The more vehicles a customer owns, the more records the customer has, and with each one, the chances of variability and error increase. It appears the union of records into one standard, edited record per customer will be addressed several years into the future within the Vision 21 project. We believe it will be advantageous to undertake the work as a separate module that hopefully can be completed earlier than current indications suggest. The conversion process will be a key element of the project.

c. Determining whether a common identifier for vehicle owners and drivers is practical

Many jurisdictions are moving to a common customer database for licensed drivers and for registered vehicle owners, particularly when the administration has both functions in the same department. This is not the case in Texas, and we found only a few direct synergies between the driving licensing and vehicle operations. In fact, there is more potential for synergy and the use of a common identifier between the vehicle inspection area in DPS than on the driver licensing side.

The obstacles caused by the 'moving target' that is the potential implementation of Real ID in driver licensing make it difficult to make a definite recommendation at this time. The audit team believes that VTR should continue to evaluate the use of a common identifier and extend its investigations to incorporate the vehicle inspection area at DPS.

d. Developing a strategy for a common vehicle identifier

VTR, TxTag in TxDOT and Vehicle Inspection Services at DPS should set up a working group to investigate the future direction for vehicle identification. In particular, this team should focus on determining the benefits for reducing the number of windshield stickers or tags and the possible future use of the vehicle license plate (incorporating a chip or similar technology) as the sole visual identifier on the vehicle. The issue of personal privacy will need to be addressed when the latter option is being evaluated.

4. Organizational opportunities

The study team's recommendations in terms of organizational opportunities include the following proposed actions:

- Continuing to maintain MVD within TxDOT.
- Moving the Temporary Tag Program from MVD to VTR.
- Moving salvage dealer licensing from VTR to DPS.
- Maintaining the IRP function with VTR.
- Initiating dialogue with the Comptroller of Public Accounts to evaluate the transfer of IFTA to the IRP Section in VTR.
- Initiating discussions with DPS about shifting the disabled parking placard program to Driver Licensing at DPS.
- Maintaining the Driver Licensing program within DPS.

Each of these organizational recommendations is discussed below.

a. Continuing to maintain MVD within TxDOT

Dye Management Group, Inc. recommends that MVD remain within TxDOT and not move to the Department of Licensing and Regulation. The audit team examined the functions of the MVD against the overall strategic consumer service functions of TxDOT and felt that there were solid reasons why MVD should remain with TxDOT. There are a number of operational elements within MVD that support significant synergies with other consumer service functions in VTR and MCD, especially if the 'umbrella' motor vehicle services recommendation under an assistant executive director is implemented. For example, recently passed legislation requires that an electronic link between the MVD dealer population and the VTR title and registration program will advance this functional synergy. As this electronic link becomes viable, the dealerships that are managed by MVD may evolve into an additional customer delivery channel for VTR.

b. Moving the Temporary Tag Program from MVD to VTR

Dye Management Group, Inc. recommends that TxDOT move full responsibility for the administration of the Temporary Tag Program (the new Web-based temporary tag system and any underlying business processes related to the administration of the registration functions associated with the Temporary Tag Program) from MVD to VTR. This transition of responsibilities will allow TxDOT to most effectively implement the requirements of SB11 and SB1786.

The Temporary Tag Program was the subject of legislation approved in the last session. Among other items, this legislation requires VTR to provide dealers with a unique temporary tag number and set up an Internet-accessible, real-time database with the dealers that is also available to law enforcement. This gives much of the key activity for the Temporary Tag Program to VTR. In conjunction with this new system, we believe responsibility for all aspects of the program should be moved to VTR.

c. Moving salvage dealer licensing from VTR to DPS

Dye Management Group, Inc. recommends TxDOT initiate discussions with DPS about the potential of moving salvage yard licensing from VTR to DPS. DPS is already responsible for investigating complaints against salvage yards. Salvage dealer regulations carry criminal penalties for non-compliance. Actions are brought by district attorneys based on investigations by licensed peace officers from DPS. In addition, DPS licenses scrap metal dealers, many of whom also hold salvage dealer licenses.

Likewise, salvage dealer licensing as an industry licensing program is an anomaly within VTR. It is also not efficiently handled by VTR, who has no investigatory, or enforcement authority or capabilities to properly manage the salvage yard dealers which it licenses.

Whereas the licensing and enforcement functions for salvage yards are currently split across two agencies, this recommendation will achieve administrative efficiencies and economies of scale by combining the licensing and enforcement functions for salvage yards within one state agency.

d. Maintaining the IRP function within VTR

Dye Management Group, Inc. recommends leaving the IRP program under VTR. We considered transferring operations for the International Registration Plan from VTR to MCD, primarily because of the concept of creating a one-stop-shopping environment for motor carriers. We concluded that, while this approach had merit, it was preferable to keep the function within its current operating environment. Our rationale for this decision included the following:

- The program is a part of the overall vehicle registration program and issues license plates.
- The VTR regional offices provide a greater coverage across the state, and as a result, should provide better access for customers than their counterparts within MCD.
- The recommendation below to initiate dialogue with the Comptroller of Public Accounts to evaluate the transfer of IFTA to the IRP Section in VTR.
- A 'One-Stop-Shop' virtual office for motor carriers has been under development by TxDOT, DPS and the State Comptroller for several years under the Texas Commercial Vehicle Information Systems and Networks (CVISN) project. Existing components include TxIRP, CPS (Central Permitting System), and MCCS (Motor Carrier Credentialing System). Eventually these functions will be available from a single portal.

e. Initiating dialogue with the Comptroller of Public Accounts to evaluate the transfer of IFTA to the IRP Section in VTR

Dye Management Group, Inc. recommends that TxDOT initiate dialogue with the Comptroller of Public Accounts about jointly evaluating the potential benefits of transferring the IFTA program to the IRP Section within VTR. The International Fuel Tax Agreement, like IRP, is a motor carrier program collecting apportioned tax revenue across multiple jurisdictions. Both programs have several operating similarities. Thus, we would suggest the transfer of IFTA operations, along with the IRP Section in VTR to form an Apportioned Programs Section in VTR. In turn, we recommend the transfer of the IRP audit activities to the Comptrollers Office, who will still maintain responsibilities for IFTA audits.

f. Initiating discussions with DPS about shifting the disabled parking placard program to Driver Licensing at DPS

Dye Management Group, Inc. recommends that TxDOT initiate discussions with DPS about shifting the disabled parking placard program to Driver Licensing at DPS. Traditionally, jurisdictions have issued special license plates for vehicles whose owners are entitled to use disabled parking spaces. Texas, like many jurisdictions, also issues disabled driver placards which have the additional flexibility of being able to be displayed on the dashboard of any vehicle that the disabled driver is using. Since the placard program is a driver-related activity, TxDOT and VTR should discuss the transfer of the placard program to the Driver Licensing Department at DPS. The disabled plate could be discontinued should this occur.

g. Maintaining the Driver Licensing Program within DPS

The Driver Licensing Program at DPS has limited direct operational synergies with the motor vehicle administration programs at TXDOT. While the bulk of customers are common to both operations, they are not mutually exclusive. We also note that there is probably little benefit and probably disadvantages in the delivery of programs through a common physical channel. The driver license offices are a more secure environment than the county offices or the VTR regional offices, which could not easily accommodate any increased volumes of transactions or the security requirements under Real ID. To perform driver license transactions, the county offices would need to upgrade their facilities, their staff would need to undergo extensive training, and the additional transactions would exacerbate the month-end peak processing activities.

There may be more opportunities for a common or shared virtual delivery channel. However, implementation of this common Internet-based customer portal, at least in the intermediate term, is complicated by the requirements of Real ID that DPS must implement for driver licensing.

Likewise, both the Driver Licensing function in DPS and TxDOT's Vehicle Titles and Registration Division have significant high-risk projects underway or due to commence in the near future. The move of one of these complex administrative entities to a different area of government at this time would substantially increase the risk of the timely completion of these projects.

5. Business improvement opportunities

In the course of carrying out this study, we noted several initiatives that provide opportunities for improving synergies with customers, reducing costs, or increasing revenue in the future. Our recommendations with regards to these initiatives are summarized below.

- The TxPROS project in MCD should proceed with development and implementation. It will provide improved service for customers and reduce staff and operating costs. A detailed discussion of this recommendation is provided in Chapter II of this report.
- Electronic lien and titling in VTR has potential benefits to vehicle owners, vehicle dealers, and financial institutions. There are also administrative savings and potential staff savings from its implementation. We recommend that VTR implement ELT as a high priority and develop this solution under the current RTS operations in a manner that allows the system to be later integrated into the Vision 21 environment. Additional discussion of this recommendation is provided in Chapter IV of this report.
- Online dealer titling and registration in VTR has benefits to dealers and their customers and will reduce operating costs. Depending on its implementation, it could also result in increased revenue through earlier collection of fees and taxes. We recommend VTR conduct a study to evaluate the most appropriate solution for the state and, similar to ELT, consider its development under RTS with the online dealer module designed so as to be capable of being incorporated into the future Vision 21 environment. Additional discussion of this recommendation is also provided in Chapter IV of this report.
- The Temporary Tag Program, as contained in recently passed legislation, should result in better control, less fraud and generate more revenue for the state. We concur with this legislative requirement and recommend the Temporary Tag Program be more tightly linked into the vehicle registration and titling system in future system developments.
- License plate-to-owner is also a subject of recently passed legislation. The bill seems to add complexity to the plate program. Implemented on a system-wide basis, a plate-to-owner program should reduce the volume of temporary tags, lower some administrative costs and provide benefits for law enforcement. We recommend TxDOT work with the legislature to seek the implementation of a full plate-to-owner program.
- A single license plate will save administrative costs and where implemented has generally been popular with motorists. We recommend VTR open discussions with law enforcement to apprise them of the future use of technology in license plates and see if they feel that the cost savings could be put to better purpose in areas such as traffic safety programs.

In conclusion, there are many recommendations for improving synergies and enhancing the business environment within the motor vehicle services area in TxDOT and also with DPS and the Comptroller of Public Accounts. Several involve changes to legislation affecting the operations of the divisions, which will need to be ready for the 2009 Session. Others can proceed with their development and implementation, so the benefits can be realized as soon as practical.

IV. Study Area #3: Using Technology to Enhance Vehicle Titling and Registration Functions

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Last year, the Vehicle Titles and Registration (VTR) Division registered almost one million more vehicles than in the previous year. Statistics show more than 1,000 people a day move into Texas. The state's soaring population figures and subsequent influx of new vehicles requires VTR to rethink its business practices. It must use new technology and ideas to establish the most efficient method for meeting the demands of its expanding business. Likewise, it needs new technology to deliver the highest quality customer service.

However, VTR is limited in its ability to apply new technologies by a number of statutory requirements. This includes requirements for virtually all registration and title transactions to be processed through the county tax assessor-collectors (TACs) and the current fee structure for processing online transactions through the Department of Information Resources (DIR) Web portal.

In response to these challenges, this audit study area seeks to identify potential opportunities for greater use of the Internet and other technologies for providing vehicle titling and registration functions. During the initial risk assessment process, the audit team assessed and documented the following risks:

- VTR1: Inability to easily implement program changes as the result of aging technology.
- VTR2: Dependence of VTR Division on the Vision 21 initiative to support the transformation of the organization and to more effectively deliver vehicle titling and registration services.
- VTR4: Limited use of the Internet as a service delivery channel for performing vehicle titling and registration functions.
- MV1: Limited control over dealer issued temporary tags (to be analyzed based on how Internet-based online dealer titling and registration can reduce the need for temporary tags).
- MP3: Dependence on technology to implement critical business change.

In this study area, the audit team addressed these risks in more detail by examining the potential for greater use of technology for providing vehicle registration and titling services, the appropriate time frame for implementing these new technologies, the impact of the introduction of technology on the county tax assessor-collectors who currently perform many of these functions, and the potential changes in the revenue sharing model between TxDOT and its tax assessor partners. The revenue sharing model may be appropriate based on changes in service delivery mechanisms and the costs being incurred by each partner. Likewise, the study area included an assessment of the feasibility of having the county tax assessor-collectors perform some additional transactions including transactions currently done in Vehicle Titling and

Registration (VTR) regional offices to offset any loss of revenue based on proposed changes in the revenue sharing model.

A. Summary of Findings and Recommendations

As part of this study area, the Dye Management Group, Inc. audit team conducted an in-depth review of vehicle titling and registration functions. Interviews with management, staff, and external stakeholders were conducted to obtain a detailed overall interpretation of the facts and issues that were facing the employees and clients of the department. These key findings are presented in more detail in the following pages, but are generally summarized as follows:

- The audit team found that overall VTR is a well managed organization that, over the last several years, has been struggling with an aging legacy system while advancements in technology offered new alternative delivery channels in which to better serve the division's customers.
- The Internet is the fastest growing service delivery channel for vehicle titles and registrations and a number of states are taking full advantage of this. For example, Arizona and Virginia's vehicle registration functions each have over 20 Internet service options available to their customers. These Web-based functions provide improved customer service to citizens and reduce the cost to the state of processing transactions.
- Likewise, Florida, North Carolina, Pennsylvania, South Carolina, and Virginia are among a number of states who offer online dealer titling and registration services, that allow dealers to submit transactions electronically, thus bypassing the county agents, third-party contractors, or motor vehicle offices that would have otherwise had to process the transactions.
- Texas is lagging behind these states in utilizing Internet-based vehicle titling and registration services. VTR currently offers only three Internet-based services and one of these services is only available in some counties.
- There are a number of reasons TxDOT is lagging behind other states in the use of the Internet. These include:
  - Current statute requires the county tax assessor-collectors to process registration renewals, thus the current Internet-based application has been designed to route through county offices for processing.
  - VTR relies heavily on county tax assessor-collectors for the delivery of vehicle titling and registration services; although much of the relationship between TxDOT and the counties are defined in statute, there is no contract or service level agreement between the two parties. This can leave some decisions, such as whether to allow the citizens of a county to be able to utilize certain Web-based or dealer specific services up to the county's elected tax assessor-collector and result in inconsistent service delivery across the state.

- Participation in the current Internet service is at the option of the county tax assessor-collector in each county. While most of the largest counties have chosen to participate, citizens in many rural counties do not currently have access to the Web-based registration renewal application.
- The fees that TxDOT are required by statute to pay to the Department of Information Resources (DIR) TxOnline portal are extremely high and consequently impact the return on investment from any proposed Internet applications.
- Customers are currently required to pay a 'convenience fee' to use the Internet application. This stands in contrast with many other industries (for example airlines) where customers are actually charged a fee for not using the Internet to perform a transaction.
- Section 501.023 of the Transportation Code requires that title transactions involve tax assessor-collectors and does not allow VTR to have a direct relationship with the dealers. This statutory limitation impacts the extent to which VTR can implement a dealer titling and registration application similar to those being utilized in other states.

- VTR has recognized the need for implementing more Internet-based applications and plans to do this to the extent it is permitted to do so by statute as part of its overall Vision 21 re-engineering initiative. However, this initiative is only in the formative stages and is expected to be a multi-phase, multi-year effort. At the same time, there are significant opportunities for substantial cost savings to the state in the near to intermediate term from the deployment of Web-based, self-service applications as front ends to the existing RTS system environment; with the applications designed to be ported to the future Vision 21 environment.
- The study team's efforts to develop a business model for the vehicle registration and titling work performed by county tax assessor-collectors suggests that many of the offices in the medium to smaller counties may not be making money processing these transactions for the state under the current fee structure. The current fees paid to the counties for processing VTR transactions have not been revised since 1991.
- The elimination of the commission paid to county offices on Internet-based transactions will have a significant return on investment for the state. This return on investment will be magnified as VTR's transaction volume grows as the state continues to see significant increases in the number of vehicles registered each year.
- Because the volume of work will be reduced, there will be a corresponding reduction in the amount of money paid to the counties for processing work they perform for VTR. In response, some counties should be able to reduce staffing levels as a result of the lower transaction volume. Likewise, it may be appropriate to slightly increase the fee for those non-Internet transactions which will actually be processed by the counties. Another strategy could be allowing the counties to perform additional types of transactions currently performed in VTR regional offices. The study team found that

there may be some opportunities to have the counties perform additional types of transactions, but that these opportunities are limited.

A stakeholders group consisting of TxDOT management and staff and external stakeholders was convened to review the audit findings and to provide guidance and input to the audit team. The stakeholder group reached a consensus opinion that the findings gathered by the audit team accurately represented the pertinent issues in terms of potential opportunities for utilizing the Internet and other alternative service delivery vehicles to perform vehicle titling and registration services.

Recommendations were then developed by the study team based upon the findings that had been reviewed with the stakeholder group. These recommendations are presented in detail later in this chapter but are generally summarized as follows:

- Dye Management Group, Inc. recommends that TxDOT seek statutory changes to enable VTR to implement a statewide Internet-based registration program which does not require any processing to be performed by county tax assessor-collectors.
- Dye Management Group, Inc. recommends that TxDOT seek statutory changes necessary to enable VTR to establish a direct relationship with the dealer community to implement an optional online dealer titling and registration program that does not require the involvement of county tax assessor-collectors.
- The study team recommends that TxDOT negotiate with the Department of Information Resources (DIR) and DIR's third-party partner for a reduction in the current fees. These fees do not reflect the potential volumes of transactions that could be processed nor are they consistent with the cost of similar statewide portals in other states. With the likelihood of VTR transaction volumes increasing by millions of transactions each year, establishing a lower fee structure based on volume is very appropriate. If reasonable fee reductions cannot be negotiated or are limited by current statutes, TxDOT should then request necessary statutory changes or a waiver from participation in the TxOnline program participation from the Texas Legislature during the next legislative session.
- Dye Management Group, Inc. recommends the elimination of the current convenience fees. VTR should encourage customers to use the Internet, rather than penalize them with additional fees in order to use the Web. To accomplish this, TxDOT should work with legislators and legislative staff in order to seek the necessary changes in statute from the next session of the Texas Legislature.
- Based on these recommended statutory changes, Dye Management Group, Inc. then recommends that TxDOT implement priority Internet applications in the current RTS environment but with portability to the future V21 environment. These applications should be designed and implemented as 'plug-ins' to the current RTS environment but built in such a way so as to support portability to and compatibility with the next generation environment to be implemented through Vision 21. This will allow VTR to meet current legislative mandates in the case of temporary tags and begin to achieve improvements in customer service and the significant benefits and return on

investment of Internet transaction processing, while continuing to design and implement the full Vision 21 environment. The applications which should be implemented on a priority basis are:

- Web-based temporary tag application.
- Internet-based application for registration renewal bypassing county offices.
- Online dealer titling and registration.
- Internet-based electronic lien and title application.

- Dye Management Group, Inc. recommends that TxDOT work with the county tax assessor-collectors to develop and implement a new revenue-sharing formula which compensates county assessors at a higher rate for the non-Internet transactions which the county will still process, but no longer compensates them for processing Internet-based transactions.
- The study team recommends TxDOT work with the county tax assessor-collectors to define and implement a service level agreement between VTR and the county tax assessor-collectors. Such an agreement would supplement the relationship as it is identified in statute and would provide the day-to-day operational guidelines for interaction between VTR and its county partners. This service level agreement would include the commitment to provide services, monetary arrangements as identified through the revised revenue sharing mode,l and other contract provisions.
- TxDOT should work with the county tax assessor-collectors to evaluate the feasibility of performing additional transactions in the county offices and implement those strategies deemed viable by VTR and its county partners. Examples of other services could include electronic liens and titles and some overdue fine collection.
- Likewise, TxDOT should continue to monitor and assess the viability of other technologies or alternative service delivery channels. These could include electronic kiosks as an option for processing certain transactions, such as registration renewals, in high-traffic locations in some counties, and the application of cellular telephone technology.

The remainder of this chapter describes our analysis of this study area in more detail. It includes a program overview, a summary of our review of best management practices in peer states, a detailed discussion of the various alternative delivery strategies reviewed by the audit team, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

The scope of this study area primarily involved the Vehicle Titles and Registration Division (VTR). This division is responsible for the registration and titling of motor vehicles across the state.

If Texas had a synonym, that word would be 'growth.' Last year, the Vehicle Titles and Registration Division registered almost one million more vehicles than in the previous year. Statistics show more than 1,000 people a day move into Texas. The state's soaring population figures and subsequent influx of new vehicles requires VTR to rethink its business practices. It must use new technology and ideas to establish the most efficient method for meeting the demands of its expanding business. It needs new technology to deliver the highest quality customer service. Today's Texas residents expect convenient, 24-7 access to services that technology can provide.

Currently, most of the delivery of services is conducted through the county tax assessor-collector offices across the state, rather than from VTR office locations. The service is delivered by mail, Internet application, or through over-the-counter transactions. VTR also issues International Registration Plan (IRP) apportioned registration for commercial carrier fleets out of its regional offices and through the Internet. The division also administers the various license plate programs and the disabled parking permits. Likewise, VTR also includes the Automobile Theft Prevention Authority (ATPA) which is responsible for administering a state funded grants program designed to reduce the incidence of automobile theft.

As VTR looks for new ways to deliver services, its primary goal is to research and study a host of recommendations that focus on technology. An array of new ideas – even something as bold as removing the current statutory burden placed on counties to conduct VTR business – may be considered as the division reaches beyond the traditional to grab hold of the future for the people it serves. However, it is critical any ideas related to counties appropriately differentiate between protected fees (i.e., road and bridge fee, sale taxes) and those paid by to the counties by VTR as transaction compensation in conjunction with registering and titling vehicles.

This section provides an overview of the VTR business functions included in the scope of this study area. It also includes an overview of the current VTR program service delivery model and background on Vision 21, VTR's planned division-wide re-engineering effort.

1. VTR business functions in study scope

The primary functions of VTR as it relates to this study are as follows:

- Vehicle certificates of title.
- Vehicle registration.
- Specialty plates.
- International Registration Plan.

Across each of these program areas, VTR has significant potential for greater use of technology. Functions that the study team reviewed in detail included initial registration, renewal, titling, license plates, name and address maintenance, and

disabled parking permits. We also reviewed the roles played by VTR itself, county tax assessor-collectors, vehicle dealers, and other stakeholders.

Each of the primary functions of VTR included in the scope of this study is described in more detail below, followed by a brief description of the current service delivery channels for these programs. The scope of APTA and its programs are covered in more detail as part of the Grants Management study area in Section VII of this report.

a. Vehicle certificate of title

When a motor vehicle changes hands, the certificate of title for the vehicle must be reassigned to the new owner. The certificate of title is, in fact, the certificate of ownership. The title transfer process can vary depending on the reason the title is being transferred, and one of the 254 county tax assessor-collector offices in Texas generally handles the transaction. When a customer buys or sells a vehicle in Texas, state law requires the vehicle to be titled in the buyer's name within 20 working days. If the vehicle is purchased from a dealer, the dealer is required by law to file the title paperwork through the county offices. If the customer buys a used car from a private party, the paperwork is also required by law to be processed by the local county tax assessor-collector's office.

b. Vehicle registration

Texas residents who own motor vehicles must renew their vehicle registrations annually either in person at their county tax assessor-collector, at an authorized agent for their county tax assessor-collector such as some grocery stores, by mail, or online if their county tax assessor-collector has endorsed an available Web-based registration renewal program. About two months before the registration sticker expires, registrants receive a renewal notice in the mail. Registration stickers are valid for one year, although a registrant can opt to prepay for up to three years at a time.

c. Specialty plates

Texas residents who are willing to pay the extra fee required for a specialty license plate have a number of options available to them. A specialty plate is an alternative registration plate that is issued instead of the standard license plate. The specialty plate may display artwork such as a college logo or indicate the owners' special status, such as a Purple Heart recipient. Of the 20 million registered vehicles in Texas, approximately only 1% of the vehicles currently carry specialty plates. Prices vary according to the category of plates, and a portion of the money collected may go to the sponsoring agency, organization, or college. Thirty-six categories of plates are restricted to specific groups of persons or vehicles. Another 17 categories carry no restrictions and may be purchased by any registrant. The clear favorite among unrestricted special license plates sold is the personalized (vanity) plate, in which people often use their initials or names.

d. International Registration Plan

The International Registration Plan (IRP) is a program for licensing vehicles engaged in interstate operations. The fundamental principle is the freedom of vehicle movement that is achieved by authorizing the sharing (apportioning) of registration fees among the states in which the truck travels. Texas was one of the first states to join IRP, a multi-jurisdictional reciprocity agreement, on September 13, 1973. To qualify for an apportioned IRP registration, a motor carrier or owner-operator must meet specific requirements that pertain both to their area of operations and to their trucks. Under IRP regulations, trucking firms and owner-operators register vehicles in their 'base' or home jurisdiction, which is defined as where the registrant has an established place of business, where the fleet accrues mileage, and where the operational records of such fleet are maintained or can be made available. The base jurisdiction issues an identification plate and a cab card to the vehicle for the purpose of registration. This identification plate is the only plate required for the vehicle by participating states. The base jurisdiction then collects the appropriate registration fees and distributes them to the other jurisdictions in which the carrier has requested IRP registration.

2. Current VTR program delivery channels

VTR currently has a key partnership with and is very dependent on the county tax assessor-collector offices across the state for the delivery of services. This partnership is defined in statute that requires the counties to play a role in both the titling and registration of vehicles. VTR relies on these offices to be the primary customer services delivery function for the issuance of vehicle titles and registrations and for collecting the fees associated with these transactions. The county offices receive compensation for the VTR services they provide but also utilize the registration transaction as the channel by which they collect significant county revenue for their road and bridge funds and other pertinent funds. While much of the business relationship is defined in statute, no formal contract or service level agreement exists between the two parties to guide daily operational activities.

From the customer perspective, their primary contact with VTR services is through the county offices that issue the vehicle registration. While the county offices process much of the title work, the titles are centrally printed and distributed from the VTR office in Austin. If certified copies of a title are needed, the customer must go to a VTR regional office to obtain this service.

When a customer uses the Internet to renew their registration, the VTR registration renewal web site is designed to display the applicant's local county office identifiers based on the address of the registrant. After collecting the transaction data, the VTR central system forwards the transaction details to the registrants' county for document processing and mailing. It is the decision of each county office whether they provide VTR service access via the Internet. Presently, only 144 of the 254 counties in Texas

provide access to their residents to be able to use Internet services. Those customers that have access to Internet services pay a $1 mail fee and a $2 convenience fee, which is equally split between the TxOnline vendor and the Department of Information Resources (DIR), when using the Internet for VTR transactions. About 6% of the 20 million registration transactions processed in fiscal year 2006 used the Internet service for VTR transactions. There is currently no Internet link available to the dealer community.

One area that has rapidly gained acceptance as a VTR Internet offering is TxIRP, which provides apportioned registration services for commercial carriers involved in interstate commence. Since its implementation in 2006, the majority of large fleet owners have used TxIRP to renew their apportioned registrations and then print their registrations (cab cards) at their own offices.

3. Vision 21 initiative

Vision 21 (V21) is an initiative to modernize the Texas vehicle registration and titling processes and to provide improved service to Texas customers. A significant number of improvement to current manual work-around processes as well as a substantial increase in the overall processing capabilities of the VTR management systems will be implemented by the V21 concept.

Vision 21 will address among other areas:

- Homeland security initiatives and improvements to the sometimes competing requirements for driver privacy protection, including:
  - Real-time motor vehicle record creations and updating.
  - Tracking vehicle and vehicle history by ownership in addition to vehicle identification number (VIN), plate number, and document identifier.
  - Assignment of license plate numbers to owners, distinct and separate from vehicle ownership but with the ability to link them together.
- Interfaces and data exchange with other federal, state, and local government agencies.
- Improved data quality through ‘source validation’ at the point-of-sale.
- Better service to TxDOT customers and partners.
- One-stop or virtual one-stop customer service.
- 24/7 or near 24/7 system availability.

Exhibit IV-1 outlines the major processes and services within the scope of Vision 21 as specified in the April 2007 business case document for the project. These changes to processes/services will impact a number of VTR stakeholders including citizens, VTR employees, and county tax assessor-collectors among others.

Exhibit: IV-1 Anticipated Vision 21 Process and Services

Processes/Services	Description of Modifications/Automation
Titling and registration of Texas vehicles	Through a re-architecture process, county tax assessor-collectors, regional offices, sub-contractors and dealers would not need proprietary hardware and software which is currently supplied by TxDOT. The new architecture would be Web-based and would allow any authorized user to access the application on the server via a Web browser. The client hardware would have to conform to minimum specifications established by TxDOT but would not have to be built and supplied by TxDOT. Since the application would be Web based clients would not have to depend on the TxDOT WAN and instead would access the application through the ISP of their choosing. TxDOT may reserve the right to specify the browser to be used by clients.
Business	Redefining of requirements/definitions of motor vehicle registration and titling processes. Shifting the business focus from the TAC as a customer to a partner.
Provide and respond to data requests and updates from counties and headquarters	As transactions are performed at all points of sale the resulting data shall be viewable from the database as pending until the transaction is processed (i.e. transfer of title pending approval of the application for title). Provide information on the current status of transactions during processing (i.e. mail-in renewal received, printed, new registration mailed). Provide real-time updates via Web-based or other emerging technology.
Plate is currently assigned to a specific vehicle	Transition from a plate to vehicle to plate number to owner environment. (The plate number can be ported between different plate types and vehicle registration classes).
Vehicle ownership is tracked by VIN and title document number	Track vehicles by ownership information (state approved ID) in addition to VIN, plate number and title document number. When a search is performed on a person's ID all vehicles associated with that person will be displayed. Joint ownership of a vehicle and/or plate number will be identified.
Manual validation of insurance information and other identifying documents	Automated real-time source validation of information at point-of-sale.
Manual handling, transportation, and storing of hard copy documentation (hard copy title\as negotiated evidence of ownership)	Elimination of requirement for individuals to present hard copy of documentation as negotiated evidence of ownership. Provide option for customer to request documentation (if required) to register and/or title vehicle in another state.
Title Document	Recognize electronic title as document of record. This may include electronic signature and/or digitized signature.

Processes/Services	Description of Modifications/Automation
Reliance on manual verification of external databases (national, state, local government automated systems)	Capability to automatically interface with remote databases providing real-time data/validation to end users of the system.
Reliance on virtual private network and servers	Re-engineering of architecture, products, and services toward a Web-based or other emerging technology to move away from reliance on virtual private network. Customers will access the application through the Web.
State issued hardware and software	Public/private interface with system through Web-based technology will eliminate the need for state supplied hardware by eliminating the need for the application to run on the customer's hardware.
Mainframe based system	Redundancy in system availability including network connectivity ensuring 24/7 system operation (client-server mode). Redundant geographically disperse hardware to provide the most resistant to disaster situations.
Direct contact between vehicle owner and TxDOT	Provide options for direct transaction processing between customers (includes motoring public) and TxDOT.
Document imaging	As long as required, image all documentation pertaining to a transaction and store on a centralized data base. All imaged documentation should be associated to the transaction and listed with the owner's information for easy viewing and history tracking.

Current plans are for an RFP to replace the core elements of the existing Registration and Titling System to be released for bid in the fall of 2009, after the next legislative session. Some enhancement module development may begin in the interim.

C. Risk Identification and Assessment

Exhibit IV-2 provides a summary of the key risks identified during the initial risk assessment which were included in this study area for additional analysis. Each risk is then described in further detail in the narrative following the exhibit.

Exhibit IV-2: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Program-wide	Inability to easily implement program changes due to aging technology	High	• It is difficult to easily implement legislatively mandated changes • It will be difficult to implement service delivery improvements that could streamline operations and reduce costs to deliver program • Changes are more costly and time-consuming • Maintenance takes an increasingly larger proportion of scarce systems resources
Program-wide	Dependence of VTR Division on the Vision 21 initiative to support the transformation of the organization and to more effectively deliver vehicle titling and registration services	High	• Capability to fully re-engineer and reinvent the VTR business model is limited by existing statutes which prescribe the role of the county tax assessor-collector in the registration and titling process, as well as by the fee structure for TxOnline • Vision21 will not be fully implemented for several years • Delays in Vision 21 will impact ability of TxDOT to substantially transform vehicle registration and titling processes • It is very difficult to make significant program changes in the current RTS systems environment

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Customer Services and Systems Management	Limited use of the Internet as a service delivery channel for performing vehicle titling and registration functions	High	• Cost to the state (VTR and/or counties) to process work via mail or in-person is increased • The Internet service is not available across the state • Customer service is reduced in counties not participating in the Internet program • Customers' choice is limited • There is potential inequity for citizens in terms of access to Internet services, depending on county of residence
Customer Services and Systems Management	Limited control over dealer-issued temporary tags (to be analyzed in this study area based on how Internet-based online dealer titling and registration can reduce the need for temporary tags)	High	• Risk to law enforcement personnel during roadside stops is increased • Homeland security risks are increased • Proposed legislation in the current session will offer a partial resolution • Implementation is expected in 2008
Multi-program	Dependence upon technology to implement critical business change – all major systems operated by VTR are heavily dependent on technology	High	• Service improvements and/or cost savings are delayed • It is difficult to obtain scarce IT resources

1. Inability to easily implement program changes as a result of aging technology

TxDOT currently has difficulty implementing legislatively mandated program changes or other potential service improvements due to aging technology. TxDOT's Registration and Title system (RTS) was originally developed in the late 1970s and has been modified extensively since. The system is currently at the end of its useful life. It is written in outdated technology. For example, the RTS system at VTR still updates data on a batch basis, rather than having immediate, real-time updating capabilities. It has been modified so much that it is often very difficult to make changes to the system to support new program initiatives. System changes are very time-consuming, quite costly, and run the risk of introducing other unintended errors.

Because of the difficulty of making system changes, some legislatively mandated initiatives have been implemented using extensive manual work-arounds. These work-

arounds can be labor-intensive, time-consuming, and costly to implement. In addition, some of these work-arounds create confusion and/or extra effort for either the staff of the county tax assessor-collectors and/or Texas citizens. For example, the renewal of a specialty plate had been a two-step process. Citizens receive one notice to pay the specialty plate fee, and once this fee is paid, they receive a second notice to pay the standard renewal fees.

In addition, a number of potential service delivery improvements are extremely difficult if not impossible to implement within the current system. This prevents VTR from making substantive service delivery improvements, which could result in cost savings and provide improved customer service to the citizens of Texas.

VTR is in the process of defining the business case for its next generation of computer-based solutions, known as Vision 21. The effort required to develop and implement the new system environment will be considerable and will extend over several years. It is not unusual to see legacy system freezes put in place while the new development is proceeding. Should this occur during development of the Vision 21 system, the time period needed to implement some changes could be extended even further.

The ranking for this risk is **High**. In terms of materiality, the limitations in the current system significantly affect the ability of VTR to transform its current service delivery processes to improve the overall efficiency and cost effectiveness of VTR operations. These limitations also affect VTR's flexibility to implement program changes to improve operations as well as increasing the cost of implementing any legislatively mandated changes to the vehicle title and registration program. In terms of the likelihood of occurrence, this is an ongoing problem that will continue until a new titling and registration application is developed as part of the Vision 21 initiative.

2. Dependence of VTR on the Vision 21 initiative to support the transformation of the organization and to more effectively deliver vehicle titling and registration services

Vision 21 (V21) is an initiative to modernize the Texas motor vehicle registration and titling processes and to provide improved service to Texas customers. A significant number of improvements to current manual work-around processes as well as a substantial increase in the overall processing capabilities of the VTR management systems will be implemented by the V21 concept.

The V21 effort, however, is constrained in the extent to which it can fully re-engineer the VTR business model by existing statutes that require the county tax assessor-collectors to perform a role in the titling and registration of vehicles. These statutory limitations prevent VTR from designing Internet-based applications that bypass the counties for transactions that customers initiate over the Internet. Implementation of Internet applications which bypass the counties would allow the state to potentially

process some vehicle titling and registration transactions at lower costs, while reducing the burden on county tax assessor-collectors to process transactions for the state which could be accomplished by other means. In addition, the fees levels established for the Department of Information Resources (DIR) TxOnline function impact the return on investment for these Internet applications.

Likewise, current plans target an August 2008 date for completion of the requirements and design of Vision 21. To achieve this date, the project team plans to release a Request for Proposal (RFP) to the vendor community by January 2008, and to recieve proposals by April 1, 2008. Final implementation is currently targeted for completion by September 2009. Based on our team's experience in other states, we believe this is an aggressive timeline for implementation. At the same time, delays in the V21 initiative will significantly influence VTR's ability to transform its operations, delay the return on the investment from the V21 effort, and increase the risk to TxDOT resulting from the current systems being at the end of their useful lives.

In addition, the Vision 21 summary documentation states that the opportunities for service improvements should be developed as part of the system's implementation. This indicates that the delivery of service improvement initiatives may not be realized for several years. For some services, such as real-time record updates, the only practical solution may be dependent upon major Vision 21 development efforts. Other services, such electronic lien and titles (ELT), may be developed using the current RTS system. The ELT programming would have to be adjusted later to properly interface with the Vision 21 system design, but by realizing the benefits produced by these new service opportunities a few years earlier, this may outweigh the costs of subsequent integration into the Vision 21 system when it is ultimately made available.

The ranking for this risk is **High**. In terms of materiality, successful execution of the Vision 21 initiative is critical in order to be able to significantly transform the current VTR service delivery mechanisms. Currently the full impact of the V21 initiative is impacted by statute. Likewise, delays in the V21 implementation increase the impact on TxDOT of the limitations of the current systems. In terms of likelihood of occurrence, this is an immediate and ongoing issue that will require substantial VTR and TxDOT senior management attention over the next several years.

3. Limited use of the Internet as a service delivery channel for performing vehicle titling and registration functions

A customer survey conducted by TxDOT in 2004 revealed that 78.9% of respondents utilized the Internet to access information about TxDOT. However, as compared to a number of other states nationally, there is currently only limited use of the Internet as a service delivery mechanism to perform vehicle titling and registration functions. Two examples of this limited use of the Internet are:

- **Vehicle registration renewal via the Internet.** While many states have been encouraging citizens to renew their registrations and perform other related functions online, the option to renew vehicle registrations via the Internet in Texas is being implemented on a county-by-county basis at the discretion of the county tax assessor-collector. While some counties (especially a number of the larger counties) are supportive of the Internet capabilities, a number of county tax assessor-collectors have not been supportive of the program. Because the revenue sharing methodology for VTR fees with the tax assessor-collectors include the counties receiving remuneration for applications processed over the Internet, there should be broad endorsement in theory, for use of the Internet because it should reduce the tax assessors-collectors' cost to process vehicle registration renewals. However, some tax assessors, all of whom are elected officials, believe that they lose an opportunity to provide direct face-to-face services to their constituents if they allow Internet access for vehicle registration services. In addition, some tax assessors have concerns about not being able to verify real-time if the vehicle owner has insurance. Likewise, the citizens using the Internet service have to pay a surcharge to cover the cost of the credit card transaction fee and the use of the state's online portal to the Department of Information Services. Discussions with some stakeholders suggested that these surcharges, or so called 'convenience fees,' could also be an obstacle to increased use of the Internet renewal function by citizens in counties where it is currently available.
- **Online dealer titling and registration**. Several states have implemented third-party vendor offerings that facilitate online dealer titling and registration via the Internet. These applications, which are generally implemented on a fee-for-service basis to the participating dealers that can be passed onto the customer purchasing the vehicle, provide an interface with the state's vehicle registration and titling system to capture information that would have been entered by a processor in the county tax assessor-collector's office. In Texas, however, Section 501.023 of the Transportation Code requires that title transactions involve tax assessor-collectors and does not allow VTR to have a direct relationship with the dealers. This statutory limitation impacts the extent to which VTR can implement a dealer titling and registration application similar to those being utilized in other states.

The ranking for this risk is **High**. In terms of materiality, the current approach does not take full advantage of available technology to reduce the cost and staff resources required for processing vehicle titling and registration transactions to the state and its agents. The lack of availability of the Internet for renewing registrations in some counties also provides a lower level of customer service than is desirable and creates a potential inequity in terms of ease of access to a statewide function based on the county in which a citizen happens to reside. This is an ongoing problem that will have additional impact in terms of opportunity costs from missed cost savings and lost efficiencies as the population of the state continues to grow and more citizens purchase, title, and register vehicles.

4. Limited control over dealer-issued temporary tags

Texas dealers issue temporary cardboard tags when they sell a motor vehicle. The tag is valid for 21 calendar days from the date of sale. The purpose of the tag is to give temporary registration to the buyer of the vehicle while the dealer applies for title, registration, and metal plates. Currently, there is no accounting for how many temporary cardboard tags a dealer issues or any provision to compel printers to identify to whom they deliver the temporary tags. The tags are not secure and can be easily duplicated or counterfeited which enables widespread abuse of the tags. There could potentially be millions of dollars in lost or delayed revenues, and the current procedure creates potential safety issues for law enforcement and the public.

The 21-day lag time between the sale of a vehicle and the issuance of the permanent metal license plates is also having an impact on lost toll revenues. Drivers without an electronic toll tag receive a monthly invoice when they use a Texas toll road. There is no need to prepay or register.

Devices above the toll lanes record the license plate of any vehicle without a toll tag. The registered owner of the vehicle receives the monthly bill. The electronic system then uses the Vehicle Titles and Registration (VTR) Division database to match the vehicle owner to the tag displayed on the vehicle.

In the case of dealer-issued temporary tags, however, the design of the temporary tag is different from the metal plate. The only information that the camera typically picks up is the expiration date. In addition, the dealer-issued temporary tag information is manually stored by the dealerships and is never entered into a centralized database. Thus, it cannot be matched in the VTR database. This then results in lost toll charges.

The issue concerning limited control over dealer-issued temporary tags is magnified at the border region. With the potential to counterfeit tags, stolen vehicles can be taken across the border without raising a concern at the border crossings because license plates are the method typically utilized for checking the status of the vehicle. This presents a high risk to the consumer in the border region. The new temporary tag design is helping to address this issue somewhat because it has the notation ‘UNTITLED’ on the tag.

Present policies enable both franchise and independent licensed dealers to manually issue temporary tags to applicants and/or purchasers of motor vehicles in the state as well as to record the transactions locally. TxDOT recently changed the format of the cardboard temporary tags issued by motor vehicle dealers. The new format was effective on May 1, 2006. The TxDOT logo is no longer required and consequently, it is not necessary to have a licensed printer produce the new tags. These temporary tags may be printed on the dealers’ office printer and lack security identifiers that prevent fraudulent duplication. The buyer’s name and vehicle identification number, along with the date sold, are logged at the dealership, but no identifying information is required to be entered into a shared database. Therefore, law enforcement officers

cannot query this information during roadside traffic stops, nor are there any means available to rapidly identify the holder of the temporary tag.

Several states have, or are in the process of, developing Web-based applications to centrally assign identifying numbers for temporary tags and record information about the vehicle and driver. Many of the states with temporary tag programs (nine states do not utilize temporary tags) have reduced their losses by adding security features to the tags, making them more difficult to alter or copy. Colorado estimated that it received an additional $11 million in revenue in the first full year after making their tags more secure. Based on population differences, this could theoretically mean additional revenue in the range of at least $25 million for Texas.

In recent years, a number of states have moved to temporary tag systems, whereby the validity of the tag identification can be verified with the registration authority. This is the approach adopted in recent legislation passed by the Texas Legislature.

Another solution to the temporary tag issue could be the adoption of a plate-to-owner strategy that substantially reduces the need for temporary tags. The technology to implement plate-to-owner in Texas is expected to be included within the Vision 21 initiative.

Motor Vehicle Division (MVD) and VTR Division staff have identified these issues surrounding temporary tags previously. However, the dealer community has generally indicated that it values the flexibility available under the current temporary tag process and does not agree with TxDOT on the significance of the safety issues. Because of the conflicting viewpoints between various stakeholders on this issue, the Texas Transportation Institute recently completed an in-depth study of the temporary tag issue and this study was in part the basis for legislation passed during the last session.

The ranking for this risk is **High**. In terms of materiality, there is the potential for significant homeland security issues and safety issues for law enforcement officers resulting from being unable to easily identify the owner/operator of a motor vehicle. In terms of likelihood of occurrence, this is a current problem. However, substantial progress has been made on this issue during the time period of this performance audit. Legislation addressing much of this issue was approved in the last session. Among other items, this legislation requires VTR to provide dealers with a unique temporary tag number and set up an Internet accessible, real-time database with the dealers that is also available to law enforcement.

5. Dependence on technology to implement critical business change

VTR is clearly dependent, through the Vision 21 project, upon the timely and successful implementation of re-engineering and/or automation initiatives to be able to deliver critical business change needed to both improve service levels and achieve operational efficiencies.

It is critical that ongoing senior management attention and focus be paid to these initiatives in order to ensure that this initiative is completed on time. The Texas Department of Information Resources and TxDOT's Information Resources Council have adopted a number of policies and procedures for managing and monitoring technology projects. However, it is still critical that TxDOT senior management monitor this effort on a regular basis to ensure that the project scope is tightly managed and intermediate deliverable dates are achieved in order to ensure that projects are completed on time and on budget. In doing so, the department will begin to achieve the targeted return on investment from these projects.

The rating for this risk is **High,** due to the dependency of VTR on technology initiatives in order to obtain cost savings and to provide improvements and flexibility in service delivery to stakeholders.

D. Audit Analysis Approach

To further study and analyze the risks included in this study area, the audit team established a technical working-group of stakeholders to provide guidance and input to the audit team. The stakeholder team consisted of TxDOT management and staff responsible for managing the elements of the study area, together with outside stakeholder representatives. Those participants serving as members of the stakeholder group for this study area included:

- Gail Anderson, Legal Assistant Administration, MVD.
- Candy Arth, Tax Assessor-Collector, County of Washington.
- David Chambers, Branch Supervisor, Special Services Branch, Vehicles Titles and Registration (VTR).
- Tobe Hubbard, Systems Management, VTR.
- Scott Renouard, Director of Support Services, VTR.
- Victor Vandergriff, Director, VT Inc,/Automotive Investment Group.

Our audit analysis approach, which was executed in conjunction with this stakeholder team, consisted of the following work steps:

6. Performing a detailed analysis of the current environment through follow-up interviews of TxDOT staff and industry stakeholders and documenting of the current process.
7. Conducting a review of best practices and lessons learned from peer states.
8. Identifying various technology and service delivery strategies, and preparing a detailed analysis of each of the identified alternatives.
9. Conducting a detailed walkthrough of our findings and analysis with the stakeholders.
10. Documenting our specific recommendations based on this analysis.

Work in this study area involved conducting detailed interviews with 16 TxDOT staff and external stakeholders. Exhibit IV-3 summarizes these interviews by role and function.

Exhibit IV-3: TxDOT Interviews Conducted

Name	Role	Function
Gail Anderson	Legal Assistant, Administration	Motor Vehicle Division
Candy Arth	Tax Assessor-Collector	Washington County
Luanne Caraway	Tax Assessor-Collector	Hays County
Mike Craig	Deputy Director	Vehicle Titles and Registration Division (VTR)
Rebecca Davio	Director	VTR
Diane Emrick-Dodson	Special Projects Administrator	VTR
Tobe Hubbard	Systems Management	VTR
Gerald James	External Stakeholder	James Brothers Auto Sales
Bobby Johnson	Director, Headquarters Operations	VTR
Keith Kiser	Vice President, Vehicle Services	AAMVA
Captain Danny Knauth	Texas Highway Patrol, Vehicle Inspection & Emissions	Texas Dept. of Public Safety
Harry Morgan	Director, Customer Services	VTR
Duane Pufpaff	Chief Headquarters Operations	VTR
Scott Renouard	Director of Support Services	VTR
Robert Tanner	Director, Registration and Title Systems	VTR
Victor Vandergriff	External Stakeholder	VT Inc./Automotive Investment Group

E. Best Practices Survey of Other States

As part of our analysis, Dye Management Group, Inc. conducted a survey to document opportunities in service delivery approaches utilized in other states. The goal of this survey effort was to better understand the success of different approaches in peer states, to identify and document best practices and lessons learned that addressed the risks identified in the Risk Assessment phase of this audit, and then assess their applicability to TxDOT. This best practices survey focused on two primary issues:

- Utilization of the Internet to process vehicle registration transactions.
- Online dealer titling and registration services.

A summary of our key findings for each of these items is discussed below.

1. Utilization of the Internet to process vehicle registration transactions

A review of the each state's web site was conducted to document the motor vehicle services provided via the Internet and to evaluate the look and feel of the web site (portal), to evaluate the ease of navigating the site, and to access the various transaction screens. We also contacted the states of Virginia and Arizona because these two states are considered among the leaders in providing Internet services for motor vehicle department functions.

The Arizona experience is probably the most enlightening. Ten years ago, faced with high transaction growth projections, budget constraints, and lengthening customer line-ups, the Motor Vehicle Division in the Arizona Department of Transportation devised a strategy to actively promote the use of the Internet as the preferred method of delivery for many of their services.

From a start in late 1997, Arizona's use of the Internet has continued to grow to the point where, in 2006, they offered 39 Internet-based services and processed close to six million motor vehicle transactions with a 98% customer satisfaction level. The majority of the services offered are vehicle-related, and we noted that within the 39 services offered, there are multiple selection options for plates and permits. Texas' population is just over three times the population of Arizona. If TxDOT had been as aggressive as Arizona DOT in promoting the use of Internet services, in theory, around 20 million transactions per year would be processed today in Texas using this delivery channel.

Some of the higher Internet usage rates achieved by Arizona in 2006 include the following:

- 100% usage for temporary registration plates.
- 70% usage for three-day permits.
- 50% usage for personalized and specialty plates.
- 50% usage for voter registration.
- 50% usage for duplicate driver licenses.
- 40% usage for vehicle registration renewals.

Arizona offered the following four key guidelines for the successful development and implementation of Internet transactions and services. They are:

- Keep it simple.
- Make it easy.

- Make it quick.
- Focus on the customer, not technology.

In addition to Arizona's Internet-based services, we also identified some general best practices based on an Internet literature search and through discussions with representatives in peer states. They include the following activities:

- **Develop an Internet strategy**. Rather than implement Internet processing in a series of unrelated projects, develop an overall strategy for using the Internet as a service delivery channel.
- **Streamline the transaction processes**. In advance of implementing Internet transactions, review the current transaction process to ensure that it is as simple and streamlined as practical, and that it is understandable and easy to use for the customer.
- **Develop a consistent look and feel**. To assist in familiarizing the customer with the Internet service, make the screen design, layouts, and the process for completing each transaction as similar as possible.
- **Consider multiple language services**. The Internet can provide an opportunity to provide services in multiple languages at a relatively low cost.
- **Impart easy access**. Make access to the Internet site and the various services as simple as practical.
- **Impart universal access**. Whenever practical, make Internet service available to all potential customers.
- **Implement security where needed**. Not all Internet transactions require account or password protection. However, for those transactions that do, provide access to multiple services and transaction through a common account number, PIN, or password.
- **Personalize as appropriate**. Where the customer is known (signed on with their password), consider adding personalized greetings or similar touches.
- **Impart access to assistance**. As there will be occasions when the customer will have difficulty completing their Internet transaction, develop access to help screens as an integral part of the solution. Also, consider providing access to a customer representative at a call center as a second level of assistance.
- **Promote use**. Develop a communication strategy to increase awareness of the Internet service and encourage its use, particularly if it is a cost saving and/or service improvement initiative.
- **Avoid deterrents to use**. Having made an investment to develop and implement the Internet service, avoid using items such as convenience fees, that will detract from customer acceptance.

2. Online dealer titling and registration

A number of states have implemented online dealer titling and registration functionality. This functionality has been implemented through third-party providers who provide a Web-based front end onto the state's vehicle titling and registration system. In some cases, the online dealer titling and registration application is also integrated with the dealers' in-house dealer management system. This allows for reuse of information captured during the vehicle sales cycle (name, address, driver license number, etc.) to process the vehicle title and registration transactions with limited re-keying of information required by a dealer's sales or back-office staff.

Two third-party vendors provide this service nationally: CVR, Inc., which is a subsidiary of ADP and one of the largest vendors of dealer management software, and TriVIN, Inc. Both vendors operate in some states; in other states, only one or the other vendor is active.

Below, we have highlighted the status of online dealer tilting and registration applications in four states: Florida, North Carolina, New Jersey, and Virginia.

a. Florida

In Florida, county tax collectors, as in Texas, are responsible for the processing of vehicle titling and registration and collection of fees on behalf of, and in conjunction with, the Florida Department of Highway Safety and Motor Vehicles. In most counties, contracted tag agents who work as agents for the county tax collectors also perform these services. As an example, in Broward County (Fort Lauderdale), the county tax collector provides vehicle registration services by mail at the Broward County courthouse and through walk-up service at two locations. Six private tag agencies at various locations throughout the county also provide vehicle registration services on a walk-up basis, with additional service fees charged by these private tag agencies.

Florida's online dealer titling and registration program has been implemented through Florida's county tax collectors and a consortium of tag agents across the state rather than through the DMV. The county tax collector and the contract agencies collect all fees, including service fees for processing all transactions, and submit the fees due to DMV as applicable. The county tax collector or the contracted agent review all transactions processed through the online system as if the transaction had been processed through their offices. The online service provider in effect is an interface between the dealer and the county tax collector or their contracted agent who is acting on behalf of the Florida DMV.

Currently, CVR is the only vendor active in Florida. Sixty percent of the franchise dealers actively use this system to process transactions. CVR charges dealerships a $15 connection fee or service fee, as opposed to calling it a per transaction fee. In

addition, this fee was negotiated between CVR and the county tax collectors and tag agents as opposed to being negotiated with individual dealers.

When the Florida Department of Highway Safety and Motor Vehicles upgraded its systems in 1999, it did work with CVR to incorporate its specific requirements into this enhancement effort, with CVR helping to fund development of some of the needed enhancements.

Key points from Florida, which are applicable to planning for and assessing the service delivery approach in Texas, include:

- Florida has successfully integrated its online dealer application with its existing service delivery model, with the contract tag agency consortium still having overall responsibility for and receiving some revenue from transactions processed through the online application.
- There appears to be a solid partnership between the Florida Tax Collectors Association, contracted tag agents, and CVR, Inc.
- There is reasonable support and buy-in for the program in the dealer community, resulting in participation from 60% of the franchise dealers.

b. North Carolina

With the exception of two state offices in the Charlotte and Raleigh metropolitan areas, vehicle title and registration transactions in North Carolina are processed by contracted third-party tag agents.

In 1998, the North Carolina Division of Motor Vehicles (NC DMV) began a pilot program with one third-party vendor, EVIN, Inc. (now triVIN, Inc.). In 2001, the NC DMV began a pilot with a second third-party vendor, CVR, Inc. Currently, CVR, Inc. and triVIN, Inc together have only approximately 269 active users out of 700 franchise dealers and 9,000 total dealers in North Carolina. The total dealers signed up is approximately 415; however, a number of these dealers do not actively process transactions with NC DMV but instead utilize the third-party services for inquiries to the NC DMV system.

While there are only a small number of the total dealerships using the system, some of these dealers are among the highest volume dealers in the state. As a result, in fiscal year 2005, approximately 430,000 dealer transactions were processed using the third-party services. This represented about 20% of the 2,168,429 dealer transactions processed in North Carolina during the 2005 fiscal year. The remaining transactions are either processed by the state offices or by the third-party tag agents.

The cost of the online transactions is typically $8 – $10 per transaction, depending on the specific agreement that a dealer or dealer consortium made with the third-party vendor. This cost is normally passed on to a customer as part of a document fee. NC

DMV pays the third-party tag agent $35 for every transaction processed by the contract agent. Thus, it is to the state's benefit for transactions to be processed through one of the online vendors.

In 2004, in part to provide an alternative for its members to the existing third-party services, the North Carolina Automobile Dealers Association (NCADA) began a project to study the possibility of developing its own third-party interface with NC DMV to be known as NC Direct. NCADA hired an outside consultant familiar with NC DMV's STARS system and developed a detailed proposal and supporting business case and risk analysis. Ultimately, the NCADA Board chose not to proceed with the project, a decision resulting primarily from concerns on the part of a number of board members that developing and hosting a software project represented a significant change in business mission for NCADA.

Following NCADA's decision not to proceed, since there appeared to be a significant interest in the dealer community for an additional or different option for providing online dealer services, NC DMV began an effort to study the feasibility of developing its own in-house Web-based system. A prototype of the proposed system was developed. However, the project is currently on hold in the face of concerns from the contract tag agents who feel their business could be significantly impacted and the two third-party vendors. The adoption of an internal online system will likely be reassessed in the near future as part of a larger analysis of NC DMV's overall service delivery processes, including an assessment of the impact of changes to and the future role of the contract tag agents (in some ways analogous to the assessment of the impact and future role of county tax assessor-collectors discussed in this chapter).

Key points from North Carolina, which are applicable to planning for and assessing the service delivery approach in Texas, include:

- There is a need for extensive buy-in from the dealers association. Likewise, the agents currently performing the service (the county offices in the case of Texas) must be actively engaged in planning for implementation of any online solution and the impacts on these agents clearly understood and planned for.
- There is a need to solicit information from and gain an understanding of the functionality offered by the various third-party providers.

c. Virginia

The Commonwealth of Virginia initially implemented online dealer titling and registration in 1992. Both CVR, Inc. and triVIN, Inc. currently provide services in Virginia. The program as currently constructed appears to work very well in Virginia. Approximately 94% of the franchise dealerships are online, and 9% of the independent dealerships are online through one of the third-party providers. At this time, 67% of all dealer transactions are conducted online.

Dealers currently using one of the third-party systems issue the registration and hard metal plate the same day, unless it is a special plate or an out of state transaction in which case temporary tags are issued. Last year, the Virginia General Assembly mandated dealerships to go online if dealerships are still issuing cardboard temporary tags. The goal of this legislation is to eliminate the use of temporary cardboard tags. Dealers would either use one of the third-party systems to complete the titling and registration functions online, or as an alternative, a software application developed by the Virginia Department of Motor Vehicles (Virginia DMV) that provides for an interface with the Virginia DMV to allow the dealerships to print temporary tags online. With this legislation, all tags issued at the dealerships, whether through the third-party vendors (hard metal plate) or through the Virginia DMV application (temporary) will be issued online. It is important to note, however, that the purpose of this legislation was not to have Virginia DMV in any way replace the functionality or services being provided by the third-partiers. It is intended to pick up the dealerships that are not online at all and to address the issues of fraud associated with temporary cardboard tags.

Several points from Virginia's experience are applicable to planning for and assessing the service delivery approach in North Carolina. These include:

- Virginia is developing a Web-based temporary tag application, similar in scope to the program to be required under SB11.
- Virginia has a high rate of participation in the online program on the part of the larger dealers and significant dealer association buy-in and support for the program.

F. Analysis of Service Delivery Alternatives

This section summarizes the audit team's detailed analysis of the potential for increased use of the Internet and other technologies in processing vehicle title and registration transactions. The study analyzed the following topic areas:

- Opportunities for increased utilization of the Internet.
- Online dealer services.
- Other potential technologies and alternative service delivery vehicles.
- Impact of the Internet and other technologies on county tax assessor-collectors.
- Opportunities for other work which could be performed by county tax assessor-collectors.
- Anticipated VTR savings.

As part of this analysis effort, the study team addressed a number of research questions which included the following:

- What potential savings could TxDOT realize from the increased use of the Internet by citizens renewing their vehicle registrations?
- If the implementation of online dealer titling and registration is pursued, what potential opportunities could be achieved?
- If there is a significant shift of transaction volume to the Internet, what other revenue sharing models between TxDOT and the county tax assessor-collectors might be appropriate?
- What options make sense to offset the loss of revenue to county tax assessor-collectors? For example, could TxDOT allow the counties to perform other transactions currently performed only in regional offices (IRP, etc.)?
- What are the risks of having county tax assessor-collectors perform additional transactions and how could these risks be mitigated?

The objective of our analysis was to assess which approaches or options would be most beneficial to TxDOT and its customers. Our findings in regards to each of these analysis areas are discussed in further detail below.

1. Opportunities for increased utilization of the Internet

In 2006, Park Associates estimated that 64% of United States households had Internet access[2]. In the same year, the Nielsen ratings estimated that close to 70% of Americans had access to the Internet at home. Some analysts suggest these percentages are close to a peak, while others feel the number of home Internet users will continue to increase, albeit at a slower pace. In any event, it indicates that two-thirds of the population are potential customers for Internet services.

The following paragraphs summarize the use of the Internet in other states and address options for increasing the use of the Internet in handling VTR transactions, both in terms of additional transactions and increased volumes.

a. Examples of the use of the Internet in processing vehicle titling and registration transactions other states

For many states, the Internet offers a means of providing improved service at lower cost compared with the traditional over-the-counter service delivery channel. Some jurisdictions, such as Arizona and Virginia, have been aggressive and successful in promoting the use of the Internet with their customers. In Virginia, Internet usage rates for registration renewals have risen to 18% of transactions, and in Arizona, it has reached 40% of vehicle renewals.

[2] http://www.parksassociates.com/press/press_releases/2006/nat-scan_pr1.html © 1998 – 2007 Parks Associates. A new study from Parks Associates has found few new households willing to subscribe to Internet services, which will limit 2006 growth in overall Internet penetration to 1%, rising from 63% to 64% by year's end.

b. Opportunities for greater Internet use within VTR

In reviewing the types of transactions processed through the Internet by other jurisdictions and the opportunities identified through our review of VTR operations, we identified a variety of potential registration and titling transactions that could be implemented by the division. They included the following:

- Vehicle registration renewals (processing the transaction directly into the back-end system with no action by the county offices, rather than collecting the data through the Internet for final validation and processing in the county office as is done today).
- Vehicle dealer transactions.
- Notice of transfer of vehicle ownership.
- Replacement of registration documents.
- Replacement of titling documents (possibly in conjunction with a future move to an electronic lien and titling system).
- Possible linking to vehicle safety and emission inspection testing.
- Ordering of specialty or personalized license plates (scheduled to be implemented by November 1, 2007).
- Ordering of missing/stolen replacement license plates.
- Proof of insurance and related transactions (scheduled to be available in 2008).
- Disabled parking permit applications.
- Short-term registration permits.
- Various vehicle registration fee calculations and similar inquiries.

As the above list indicates, there is considerable potential for expanding Internet services for VTR customers and stakeholders and the division regularly talks with the county tax assessor-collectors about offering additional online services in their counties. Continued growth in the use of the Internet is inevitable, both in terms of increased capabilities and users. If the experience of Arizona and Virginia is used as a guideline, it seems likely that between 20% to 30% of registration- and titling-related transactions in Texas would gravitate to the Internet environment within the first few years of implementation.

Some of the challenges faced by VTR and TxDOT in expanding Internet usage include:

- TxDOT will need to request changes and updates to statutes in future legislative sessions to allow for the bypassing of county offices for transactions processed over the Internet.

- TxDOT will need to work with county tax assessors-collectors to encourage county offices to offer their residents access to Internet services in a consistent manner throughout the state.
- There is a need to simplify processes and procedures. For example, TxDOT would need to eliminate the need for signatures, replace them with digital versions, or eliminate requirements to visit VTR regional offices or county offices to complete certain transactions.
- TxDOT will need to consider the elimination of convenience fees or other process deterrents that may reduce customer acceptance of Internet services.
- TxDOT will need to analyze whether to implement modular solutions within the current RTS legacy system or delay implementation for several years until Vision 21 is fully developed and institutionalized.

The most significant aspect related to increasing the use of the Internet to submit and process titling, registration, and related transactions is the impact on VTR's current main delivery channel, namely the county tax assessor-collectors' offices. This subject is discussed in further detail in Section IV.F.4 below.

2. Online dealer services

Vehicle dealers are important stakeholders in initiating transactions and providing that transaction data to VTR's registration and titling system. Consequently, there are additional opportunities for service improvement and the potential for cost savings by establishing an online Internet connection between dealers and VTR.

In Texas, there is currently no direct Internet or other telecommunication link established between vehicle dealers and VTR. Section 501.023 of the Transportation Code requires that title transactions involve tax assessor-collectors and does not allow VTR to have a direct relationship with the dealers.

There is, however, also no direct electronic link between dealers and the county tax assessor-collectors offices. There is an existing data entry system that has been developed for vehicle dealers by third-party suppliers and is supported by VTR; however only 31 counties have approved the use of this application within their boundaries. The Dealer Titling Application (DTA) enables approved dealers to collect titling and registration information on a disk and then forward the disk to their county office for processing. Some dealers also have the ability to print the registration document and windshield tag and also issue plates at their dealership. Interestingly, one software supplier is developing an enhancement to download data from VTR to their dealer system using the Internet, but is unable (due to current VTR policies and statutes) to upload the details back using the same technology.

a. Dealer titling and registration

In many states, including California, Florida, Illinois, Virginia, and New Jersey, third-party system suppliers provide automated solutions for dealers to process vehicle sales and title transfers, process the registration and titling transactions for the customer, and provide the links, via the Internet, to upload and download data between the dealer and the state's systems. Participation rates among the 20-plus states with dealer titling and registration programs range from 60% plus in South Carolina and Florida, around 45% in New Jersey, to just one dealer in Nevada.

These dealer titling and registration applications, which often link with the dealer's internal dealer management systems, often are operated at little or no cost to the state. Expenses are usually borne by the dealer, who may absorb the costs or pass them on to their customers. The advantages to the dealer include simpler and less time-consuming titling and registration processing, increased accuracy, faster fee and sales tax collection, and most importantly, better customer service. There is usually more participation from the larger franchise dealerships because they normally have the higher volume operations within the state.

With Texas' large population, dealer and vehicle base would seem to be in an enviable position to benefit from the implementation of online dealer systems. However, there are a number of issues that need to be addressed before a formal statewide program is introduced. They include the following:

- Is the program best implemented on a mandatory basis, only mandatory for larger dealers, or through voluntary participation?
- Will the program have the support of the various automobile dealer associations within the state?
- Will it be developed and operated by VTR or utilize the services of third-party suppliers?
- What role will the county tax assessor-collectors play in the program?
- What statutory changes will be required in order to implement the program?
- What impact will reduced dealer title and registration transactions have on the county offices?

b. Temporary tags

As with most states, Texas also issues a temporary registration tag for a newly acquired vehicle. The Texas tag document is one of the least secure and is more susceptible to fraud. Many states have moved to tags containing security and tamperproof features. According to the largest supplier of such secure tags, Colorado saw a $12 million registration revenue increase after a more controlled environment was established. Based on population differences, this could potentially equate to a gain in excess of $50 million in revenue in Texas.

However, the current best practice employs a secure electronic tag that links the Temporary Tag Program to the state's registration system. Arizona has been using such a system since 2002 and in fiscal year 2006 processed 850,000 transactions. Several other states including Montana, Virginia, and Florida have also implemented similar programs.

The Temporary Tag Program in Texas is administered by the Motor Vehicle Division (MVD) in TxDOT, who by statute can only regulate the specifications of the tag itself. It is the dealer's responsibility to issue and control the temporary tags. Neither an electronic database of tags nor a link to the vehicle registration system at VTR currently exists.

In October 2006, the Texas Transportation Institute (TTI) issued a report that was critical about the Temporary Tag Program. Their conclusions included the following:

- "…the current Texas system for temporary tags is not effective in protecting public and transportation safety and security."
- "…tags are issued multiple times for the same vehicle, although such practice is not permitted by statute."
- "The State of Texas, counties, other local governments, and toll authorities lose revenue…"
- "In the absence of a database for reference, state and local governments cannot accurately and efficiently verify the timely payment of motor vehicle sales tax and fees."
- "…counterfeit tags are used to transfer stolen or salvage vehicles across the border without contest."

The TTI report noted that nine states do not use temporary tags, but require vehicle owners to carry proof of purchase or title until registration. It also noted that in 38 of 50 states, the vehicle plates follow the owner. This feature reduces the potential number of temporary tags issued by a jurisdiction for vehicle transfers, when compared to the plate-to-vehicle program that is currently operating in Texas. The report considered the introduction of electronic temporary tags in Texas and indicated that both MVD and law enforcement support their implementation, although support from the dealer community was mixed. It suggested that VTR "can prescribe the specifications for an electronic system to complement existing automation with the RTS system already in place."

As part of the study leading to the TTI report, the MVD call center asked dealers who called into the center whether they had Internet access. Ninety percent confirmed they had the capability. MVD also asked the same question of dealer participants in their training sessions. In this instance, 96% confirmed they had also had access to the Internet.

During the 2007 legislative session, the Texas Legislature adopted SB11, which requires that some type of electronic tag be issued in Texas. It decrees that VTR rather than MVD will be the agency responsible for the development of the new temporary tags and further requires the use of electronic tags to be implemented in 2008. It envisions that dealers will communicate with VTR through the Internet and vehicle details together with the owner name and address will be transmitted to VTR and recorded in a database. In turn, VTR will supply a unique reference number to dealers which will be recorded on the tag. Law enforcement will have the ability to access the VTR database and determine the validity of the temporary tag displayed on a vehicle.

We also understand the Vehicle Inspection Division in the Department of Public Safety (DPS) has an initiative to link all state inspection stations via the Internet to a vehicle database to be maintained by the division. There are many new and used vehicle dealers who also operate as licensed inspection stations. Thus, there could be additional synergy in some joint development efforts between DPS and VTR to achieve economies of scale between these two efforts.

3. Other potential technologies and alternative service delivery channels

This analysis area considered the potential use of various technologies and other alternative service delivery vehicles for vehicle titling and registration other than the Internet. These included cellular telephones, touch-tone phones, electronic kiosks, and automatic renewals.

a. Cellular telephones

Cellular telephones have widespread and growing use by individuals, businesses, and governments. They are small, lightweight, portable, and also possess increasing functionality. Their use is gaining momentum in a number of areas. They can process text messages, link to computer networks, and store ever-increasing amounts of data in various formats. In some countries, cellular phones are used to make payments and are used as an ‘electronic purse.’

We are not aware of any jurisdiction currently using cellular phone technology specifically to handle motor vehicle transactions, such as registration renewals, but we suspect it will be common in the future to process selected transactions over both the Internet and the cellular network.

b. Touch-tone phones

Virtually everyone in the United States has access to touch-tone land-line telephones, although some people are eliminating their use by moving solely to cellular service. Touch-tone phones can be used to handle simple transactions using numeric data only. They are used by a few jurisdictions to process vehicle registration renewals.

However, their future potential seems limited when compared to their cellular counterparts and to the Internet.

c. Electronic kiosks

Electronic kiosks have similarities to the ATM used by banks and the passenger check-in terminals used by many airlines. They are also used by a few jurisdictions, including Michigan and Ontario, to handle transactions such as registration renewals. The kiosks often have touch-screen access and incorporate print capabilities to produce output registration documents and tags. They are usually installed at vehicle registration offices and in high-traffic public locations, such as shopping malls.

The kiosks are supplied by third-party vendors, who also develop the software required to process the transactions and link into the jurisdiction's registration system. Vendors have been in contact with VTR to promote the use of electronic kiosks within Texas. Because the decision to install and use the equipment is the prerogative of each of the county offices, rather than VTR on a statewide basis, the vendors have not actively pursued the Texas market.

d. Automatic renewals

This is a process that has been considered by several jurisdictions, but to the best of our knowledge, it has not been implemented in any state. It involves the use of pre-authorized funds or credit card withdrawals and the automatic processing of an annual registration renewal without customer involvement. The concept includes the issuance of a customer reminder either by mail or Internet of impending funds withdrawal, followed by the automatic renewal processing and the mailing to the customer of the renewed registration document and tag.

The alternative delivery channels reviewed above have some application to VTR services. Cellular phones are a growing potential option for service delivery and could be considered as a future delivery channel offering selected parallel services to the Internet. On the other hand, touch-tone phones do not appear to have the same future potential as their cellular counterparts. Electronic kiosks may be appropriate in some high-traffic offices or other locations. If third-party suppliers wish to invest and develop Texas specific electronic kiosk solutions, consideration could be given to their implementation. Automatic renewal is an interesting concept and may be worthy of consideration within the Vision 21 framework.

4. Impact of the Internet and other technologies on county tax assessor-collectors

For many years, the county tax assessor-collector offices across the state have processed the vast majority of registration and titling transactions for TxDOT. The

main exception is the processing of apportioned registrations for commercial carriers, which is carried out by VTR and their regional offices. As part of the vehicle registration process, the county simultaneously collects local road and bridge fees, which make up over 80% of the VTR-related revenue stream, and service compensation fees that accrue to the county. They receive $1.90 in commission for each registration receipt and $5.00 in compensation for each title processed. The cost of mailing the documents is also recovered from the state. This $1.00 mail processing fee is received for about a third of the transactions processed by the county offices.

The current use of the Internet has not impacted the revenue stream for the county offices, because the renewal and change of address information collected via the Internet transactions is forwarded to the county for final verification and processing. This situation could change if the Internet transaction was automatically processed by the VTR system, thereby bypassing the county office. Similarly, if an Internet-based dealer registration and titling system was implemented, processing could be automatically handled by VTR's systems again without involving the county.

The impacts of Internet registration will vary from county to county. It is expected that acceptance will be higher in the urban centers than the rural areas of the state. This would likely also be true with regard to a dealer Internet system, which, unless completely mandatory, would probably see higher use rates among the highest volume dealers, who tend to be located in the larger population areas.

The implementation of more extensive Internet services will be felt by the county offices both operationally and financially. On the operational side, the county will see a decrease in customer visits and a reduction in work for the registration personnel employed by the county tax assessor-collector. This may lead to staff reductions and lower operating costs, although higher month end transaction activity will still have to be adequately staffed. Smaller offices with fewer staff may not realize any savings and may potentially incur some increase in their cost per transaction handled.

The financial impact of the application of the Internet and other technologies to bypass county offices for some transactions processing lower transaction volumes is dependent upon a number of factors, including:

- The assumption that there will be no change in county road and bridge fees. These fees will still be collected for Internet-based vehicle registration transaction. VTR would collect these fees on behalf of the county.
- There will be no change in the portion of the vehicle title fee ($5) now allocated to be paid to the county by statute.
- The county will continue to receive, from the State Comptrollers Office, a commission for collecting the tax on vehicle sales originating within the county.
- The assumption that the processing fees paid by VTR to the counties will be reduced as a result of Internet-based transactions bypassing the county offices.

According to VTR records, in fiscal year 2006, the county offices received $463.8 million in association with their vehicle titling and registration activities. This does not include the sales tax commissions from the Comptroller's Office. The revenue can be divided into four main categories as shown in Exhibit IV-4 below:

Exhibit IV-4: Summary of FY 2006 County Assessor Revenue by Category

Revenue Category	Revenue Per Category (millions of dollars)	Percentage of Total Revenue
Registration: County Road and Bridge Fund	$196.3	42.3%
Registration: Optional County Road and Bridge Fund	$182.0	39.2%
Registration: Commission and Postage Recovery	$58.2	12.5%
Titles: County Allocation Under Statute	$27.2	5.9%
Total County Revenue	$463.8	100%

For purposes of this analysis, we are assuming that county funds and the titling revenue will continue to accrue to the counties exactly as it does today. This means that 87.5% of the current revenue stream will continue to be received by the county irrespective of an increase in Internet transactions which would bypass the county offices. The only item having the potential for a reduction in revenue to the counties is the registration commission and mailing fee. These fees total up to $2.90 per transaction ($1.90 for each transaction and an additional $1.00 mail processing fee for about one-third of the transactions).

However, the county has fully burdened staffing (salaries, benefits, and overhead) and mailing costs that are incurred when processing registration transactions at their office. Taking these into consideration, the net total (revenue less expenses) represents the income to the county. This will vary considerably county by county, depending on factors such as economies of scale and efficiency of operations.

The fees paid to the counties have not been adjusted for some time. The $1 mailing fee was set in 1969, the $1.90 registration commission fee in 1991, and the $5 share of the title fee was also last updated in 1991. Since the establishment of these fees, inflation and other cost drivers have increased significantly. Off-setting this, the use of

technology and the introduction of the RTS system in VTR in the mid-1970s has also reduced the time taken to process a transaction.

We were unable to uncover any existing study of the revenue and expenses incurred by county tax assessor-collector offices to determine the level of income that may be generated from titling and registration services by county offices. As a result, to help understand the potential impact of any changes in the revenue sharing formula between the state and the counties as the result of new service delivery vehicles, we developed a simple model based on information received from several county offices. Based on the compensation these counties receive, it suggests that the majority of medium to small transaction volume offices (which is the majority of all county offices) may be operating at close to break-even or are incurring a small loss when processing VTR transactions. The prototype business model for a small county office under the existing revenue sharing model is included as Exhibit B-1 in Appendix B of this report.

The larger county offices have a greater volume of transactions processed, as represented by the sample offices within the model. With their economies of scale, it is perceived that larger offices generate a positive revenue flow when processing their registration and titling transactions. This prototype model for the larger offices under the current revenue sharing model is included as Exhibit B-2 in Appendix B of this report.

Using the transaction assumptions model as a base, we evaluated the impact of a 25% decrease in registration and titling transactions on the offices as a result of implementing Internet renewal and dealer titling and registration processing. We also adjusted the assumed staffing levels to compensate for the loss of transaction volumes. The offices with larger staff had more staffing options available to them. Even so, both offices appeared to continue to operate at a slight loss. The prototype models for the small and large offices under this revised revenue sharing model are provided in Exhibits B-3 and B-4 of Appendix B respectively.

It should be noted that although the volume of titles processed by the offices in the model shown in Appendix B had been reduced by the implementation of a dealer titling and registration system, the income has not been similarly reduced. This is because we assumed the statute giving the county offices $5 for each title processed in the county will not be changed. If it this statute is adjusted to provide income to the counties for only those title transactions actually processed by the county, then the lost revenue resulting from changes inVTR operations in our model county offices will be significantly higher.

In addition, the county tax assessor-collector offices are currently allowed to keep the funds received from registration and titling for a period of up to 30 days before forwarding them to VTR. This float will be reduced by those transactions processed over the Internet. The impact to the county assessors from this reduction is not known.

The study team also modeled the impact of an increase in fees paid to the county tax assessor from $1.90 per transaction to $2.25 for those transactions which would actually be processed by the counties (non-Internet transactions). At this fee level, it would appear, as illustrated in Exhibit B-5 and B-6 of Appendix B, that the financial gap is slightly reduced for both larger and smaller counties. The small county impact also may be understated as the model assumes that the county staff is 100% dedicated to VTR work versus being able to perform some county work as well.

These models suggest that it may be appropriate to implement a tiered fee approach based on the volume and complexity of the transactions actually processed by the counties. This type of fee structure could provide a reasonable level of compensation for smaller counties as well as take into consideration the economies of scale being achieved by larger counties. The results of a VTR-initiated fee study, currently underway, should provide more specific recommendations in this regard.

The financial impact of increased Internet processing of vehicle registration and titling transactions by county residents and dealers may turn out to be lower than anticipated. The current revenue from title transactions and the various county fees amount to almost 90% of the total revenue received by county offices, and this revenue will continue to be collected. Indeed, most counties will see increases in their income from these sources due to the annual growth rate of approximately 5% in the state's vehicle population.

The more populous counties will potentially realize greater impacts from increased Internet-based transactions. However, with their economies of scale and more flexibility in staffing resources, they are likely more able to maintain a surplus from their operations. It is the smaller counties that may be more negatively impacted by greater Internet use. While rural county Internet use may be lower than in the larger centers, these counties also have less ability to reduce their staffing and related costs.

5. Opportunities for other work which could be performed by county tax assessor-collectors

While bypassing the county offices for Internet-based transactions may have some negative aspects for county offices, there are some potential opportunities for increased revenue and income. For example, later this year, the responsibility for issuance of special plates is scheduled to be transitioned to county offices. Speciality plates will generate approximately 250,000 new transactions for county offices per year at an additional 50 cents per transaction.

As part of the study team's analysis, we looked for other opportunities for transactions which could be processed at the county level. The goal was to identify opportunities for providing enhanced service to Texas citizens, reducing transaction cost to VTR and providing additional revenue streams to the county offices to offset lost revenue

due to an expanded Internet program which bypasses the counties. Some potential opportunities are described below.

a. Electronic lien and titling

VTR is considering the introduction of electronic lien and titling (ELT) to replace the current paper intensive system. The implementation of such a system may significantly reduce or eliminate the need for certified title copies, which is the largest volume transaction now handled by VTR regional offices. However, there will still be a requirement for state-sanctioned copies of titles. As no special security paper or other equipment is likely to be required, the copies should be able to be printed at county offices.

The projected transaction volumes for these state-sanctioned copies of titles are unknown, as they depend on how the ELT system will be designed and implemented. It is quite possible, however, that title copies could be provided to an authorized customer via the Internet, thereby reducing the potential walk-in volumes in county offices.

b. Overdue fines collection

Some jurisdictions take advantage of the annual registration renewal to collect a variety of overdue fines before the renewal can be processed or vehicle ownership transferred. There is added risk that some vehicle owners with large outstanding fines may decide to avoid renewing their registration and therefore drive unregistered vehicles. To combat this a few jurisdictions have significantly increased the penalties for having an unregistered vehicle on the road. At least one jurisdiction has introduced a monthly payment program for delinquent owners. Should one of these payments become overdue, the registration is suspended.

The best practices for this type of program include the following:

- Only overdue fines which are related to the ownership and use of vehicles should be considered for collection as part of the registration process.
- The overdue fine details and amounts due should appear on the renewal document, so the customer is aware in advance of registration for the requirement to pay outstanding fines in addition to their vehicle registration.
- The customer should be able to make payment at the time of renewal and not directed to another location to pay additional fees.

The variety of overdue fines that could be collected from such a program includes:

- Traffic offenses, whether issued by the state or the county.
- Unpaid tolls or toll fines.
- Unpaid parking fees.

- Driver responsibility program fees (this option would require a link between drivers licensing and vehicle systems to become operational).

The county tax assessor-collector offices could generate additional income by receiving a commission or fee for the collection of the outstanding fines. The county and other local government entities could benefit from the increased collection of the fines. At the state level, TxDOT would also benefit from the collection of overdue toll amounts, while DPS will similarly gain from the collection of increased traffic offense fines and vehicle responsibility assessments.

The implementation of overdue fines collection is not a simple matter and would require careful design since each separate fine collection system would need to communicate through the Internet, potentially in real-time, with the VTR system.

Finally, it should be noted that the county offices may not welcome this 'opportunity' with open arms. Some will be concerned with the potential of dealing with more disgruntled customers, who may be disputing the fines. Other county offices may perceive the collection of vehicle related fines, as another opportunity to collect a variety of government receivables. They may also believe customer relations may be hampered by the introduction of such a system.

c. International Registration Plan (IRP) transactions

The study team also considered the possibility of transferring responsibility for processing IRP transactions to the county offices. IRP requires commercial carriers traveling interstate to register their vehicles in their base state as well as all other states and the provinces of Canada in which they operate. In Texas these transactions, which are more complex and require specialized knowledge, are handled by VTR, rather than the county offices.

It has been suggested these transactions could be processed by county offices. However, VTR developed and, in 2006 implemented, an Internet-based system (TxIRP) to handle much of the data entry and processing of these transactions. It also enables the carrier to print the registration document (cab card) in their own office. The system has been successful and most large fleets, representing the majority of apportioned vehicles, use the TxIRP Internet option. Likewise, the percentage of use of TxIRP is expected to increase. As a result, the remaining transaction volume is probably too small to warrant its transfer to the county offices, particularly due to the extensive training that would be required. Maintaining the processing of the remaining transactions at the VTR Regional Offices would be the most effective processing method.

There do not appear to any obvious or significant opportunities to easily increase transactions, and therefore revenue, for the county tax assessor-collector offices. Depending on how it is implemented, electronic lien and titling may represent a future opportunity for additional transactions. Overdue fine collection may also represent a

future revenue generator for county offices and assist in collecting other revenues for local and state government, but it is not necessarily a service the county office may wish to provide.

6. Anticipated VTR savings

VTR should experience financial savings by expanding Internet services and having these Internet-based applications bypass the county offices. This return on investment will be magnified as VTR's transaction volume grows as the state continues to see significant increases in the number of vehicles registered each year.

The most significant item, and the one with the highest volume of transactions, is the vehicle registration renewal. Eliminating the need for county office intervention would save VTR $1.90 per transaction. However, there will still be a need to mail the renewal registration and windshield sticker. This is likely to cost around 50 cents per transaction for envelope stuffing, mailing and related supplies and must be added the overall Internet processing expense.

We understand that the department's current contract with TxOnline imposes a fee of $2 per transaction. This appears to be excessive, particularly if the volumes processed via the Internet grow to millions of transactions. In this situation, we believe the cost per transaction for Internet use should be in pennies rather than dollars per transaction.

The cost of processing the transaction using the automated VTR registration and titling system should be similar for both Internet and non-Internet transactions. Internet transactions should be edited at the time of data collection, so the transactions will be largely error free.

Assuming the TxOnline contract can be re-negotiated to reduce the processing fees to 50 cents a transaction (based on the anticipated increase in volume that TxDOT can bring to TxOnline), a saving of almost $1 per transaction would be realized on all Internet-based transactions, with savings of an additional $1 per transaction for the one-third of transactions for which the counties currently receive a mail processing fee.

Based upon the Internet renewal usage reported by Arizona (40%) and Virginia (18%), Texas may potentially realize a 20% usage rate after a few years of operation. After adding Internet transactions received from vehicle dealers, this percentage could rise to approximately 25%.

Exhibit IV-5 illustrates the potential annual return on investment for the state at the current level of volume assuming the following:

- A base of 20 million registration transactions.

- Twenty-five percent of transactions are processed through the Internet, with the remaining transactions processed by county offices.
- County tax assessor-collectors are compensated at a higher rate for transactions actually processed in the county offices. For purposes of this analysis, we have assumed that this new processing fee would be $2.25.
- The mail processing fee currently collected and retained by the counties would be collected and retained by VTR on Internet based transactions to cover the cost of processing the transaction and mailing the registration documents.
- County tax assessor-collectors would continue to collect and retain an additional $1.00 mail processing fee for approximately one-third of the transactions actually processed by the county offices.
- The TxOnline fee is re-negotiated to 50 cents per transaction based on increased volumes.
- The cost of mailing the Internet-based transaction is 50 cents.

Exhibit IV-5: Anticipated Savings from Greater Use of the Internet at Current Transaction Volumes

	Number of Transactions	Handling Fee	Total Expense
Current Model			
Counties process 20 million registrations per year @ $1.90 transaction handling fee	20,000,000	$1.90	$38,000,000
Counties received additional $1.00 mail processing fee for 1/3 of the transactions	6,600,000	$1.00	6,600,000
SUB TOTAL			**$44,600,000**
Future Model			
Counties process 15 million registrations per year @ new $2.25 transaction handling fee	15,000,000	$1.90	$33,750,000
Counties received additional $1.00 mail processing fee for 1/3 of the transactions	4,950,000	$1.00	4,950,000
Internet processed registrations @ $1.00 processing expense (50¢ TxOnline fee plus 50¢ mailing fee)	5,000,000	$1.00	$5,000,000

	Number of Transactions	Handling Fee	Total Expense
SUB TOTAL			**$43,700,000**
NET SAVINGS			**$900,000**

Exhibit IV-6 illustrates the potential return on investment based on an annual 5% increase in transaction volume, all other assumptions held constant. This shows that there is an increased payback in shifting transactions to the Internet at higher levels of transaction volume.

Exhibit IV-6: Anticipated Savings from Greater Use of the Internet at a 5% Increase in Transaction Volumes

	Number of Transactions	Handling Fee	Total Expense
Current Model with 5% Growth			
Counties process 15.75 million registrations per year @ $2.90 transaction handling fee	21,000,000	$1.90	$39,900,000
Counties received additional $1.00 mail processing fee for 1/3 of the transactions	6,930,000	$1.00	$6,930,000
SUB TOTAL			**$46,830,000**
Future Model with 5% Growth			
Counties process 15.75 million Registrations per year @ new $2.25 transaction handling fee	15,750,000	$2.25	$35,437,500
Counties received additional $1.00 mail processing fee for 1/3 of the transactions	5,197,500	$1.00	$5,197,500
Internet processed Registrations @ $1.00 processing expense (50¢ TxOnline fee plus 50¢ mailing fee)	5,250,000	$1.00	$5,250,000
SUB TOTAL			**$45,885,000**
NET SAVINGS			**$945,000**

G. Key Findings

Based on our review of current operations, our best practices survey of states, discussions with TxDOT staff and stakeholders, and our review of various alternatives, this section

summarizes our key findings regarding Internet use and other alternative service delivery channels for vehicle titling and registration processing. These key findings include the following:

1. Texas is a fast growing state; to maintain the same level of quality of customer service in this environment will require VTR to significantly re-invent its business model

- The population growth of Texas outpaces the nation. This is leading to explosive growth in the number of vehicles being titled and registered in Texas.
- Last year, VTR registered almost one million more vehicles than in the previous year.
- Texas' soaring population and subsequent influx of new vehicles requires VTR to fundamentally rethink its business model to use new technology and innovation to continue to efficiently deliver high quality customer service.
- Likewise, customer demands and expectations for improved service will continue. As new technologies offer opportunities for different services solutions, government will be expected to utilize them.

2. The Internet has potential to be the fastest growing service delivery channel for vehicle titles and registrations

The Internet has the potential to be the fastest growing delivery channel for VTR for a number of reasons including the following:

- The majority of customers and stakeholders have access to the service.
- It is available 24 hours each day, 7 days a week.
- It is usually a lower cost alternative than existing services.
- It enables jurisdictions with significant population growth to accommodate an increasing volume of transactions with no or little growth in additional resources.

3. Texas is lagging behind many states in Internet vehicle titling and registration service implementation

- Arizona and Virginia each have over 20 Internet service options available to their customers.
- VTR has only three options offered via the Internet.

4. There are a number of statutory limitations that must be addressed before TxDOT can substantially increase its use of the Internet or enabling technologies for vehicle title and registration processing

These statutory limitations include:

- Current statutes require the county tax assessor-collectors to process registration renewals; thus, the current Internet-based application has been designed to route through county offices for final verification and processing.
- The fees that TxDOT are required by statute to pay to the Department of Information Resources (DIR) TxOnline portal are extremely high and consequently impact the return on investment from any proposed Internet applications.
- Section 501.023 of the Transportation Code requires that title transactions involve tax assessor-collectors and does not allow VTR to have a direct relationship with the dealers. This statutory limitation impacts the extent to which VTR can implement a dealer titling and registration application similar to those being utilized in other states.

5. Internet service is not available to VTR customers across the state in a consistent manner

- Participation in the current Internet service is at the option of the county tax assessor-collector in each county. While most of the largest counties have chosen to participate, citizens in many rural counties do not currently have access to the Web-based registration renewal application.
- In counties that do not participate in providing Internet services, their residents are penalized through reduced choice and service options.

6. There are many potential Internet applications that could be developed by VTR

- Most of the applications that have been developed in other jurisdictions to process titling and registration are applicable to Texas.

7. TxOnline fees and convenience fees are a potential deterrent to Internet growth and acceptance

- Customers are currently required to pay a ‘convenience fee’ to use the Internet application in order to make sure the state receives the same amount of net proceeds (less online and credit card processing fees) as the state would receive for a walk-up transaction.

- The fee charged by TxOnline appears high for the service that is provided, particularly if there is a potential for millions of additional transactions that may be processed via the Internet.
- The $2 convenience fee negatively impacts customers' acceptance of Internet service offerings and is a probable deterrent for some potential customers. Industries, such as the airlines, encourage their customers to use the lower cost Internet services and are accessing fees to customers that do not use the Internet.

8. The Temporary Tag Program could be improved with an electronic link to VTR

- Senate Bill 11, as adopted by the last session of the Texas Legislature, stipulates that an Internet link between dealers and VTR be implemented. This is supported by both the Texas Auto Dealers Association and the Texas Independent Auto Dealers Association.
- The audit team assumes VTR will collect name, address, and vehicle data and maintain it in a file that will be accessible by law enforcement.
- The provisions regarding private sales suggest optional participation in the program by the general public.

9. Dealer Internet-based titling and registration has proven beneficial in other states

- There are a variety of solutions that have been implemented in other states with mandatory participation, mandatory participation for larger dealers only, and voluntary dealer participation options.
- Third-party solution providers now link into vehicle titling and registration systems in over 20 states.
- Bypassing the county offices will result in a loss of registration processing revenue for those offices.

10. The increased use of the Internet for titling and registration transactions will result in some loss of revenue to county offices

- The majority of current revenues will continue to be received by the county offices.
- It is unclear if many medium or smaller counties currently generate sufficient commission revenue from registration and titling activities to cover their expenses for providing VTR services.

11. The major portion of fees associated with the vehicle registration titling process and received by the counties will not be impacted by increased Internet use

- County road and bridge funds and other funds and fees will continue to be collected by the counties under an Internet-based system.
- The $5 county share of the title processing fee is designated by statute and unless changed will continue to be received for all titles issued for residents that reside in the county.
- The county will continue to receive, from the State Comptrollers Office, a commission for collecting the tax on vehicle sales originating within the county.

12. There are limited opportunities for additional transactions at county offices

- The possible future development of an electronic lien and titling system will enable county offices to print copies of vehicle titles.
- Overdue fines collection may provide additional revenue opportunities, if county offices support providing the service.
- Both of the above options require the development of computerized systems for implementation.

13. There is no formal agreement in place between VTR and county assessors

- Both parties are heavily dependent upon each other. VTR utilizes the county offices for its primary customer delivery channel for titles and registration transactions, while the county offices use the registration transaction as the medium to collect many of their own fees.
- Lack of a memorandum of understanding leads to inconsistencies in services provided. For example, some counties accept Internet renewal processing and other counties decline in providing this service.

14. Internet expansion can be implemented using the current RTS as a base; it does not necessarily require full implementation of Vision 21

- Internet processing system modules tend to be ‘front end’ developments that link into the existing legacy ‘back end’ environment.
- Vision 21 (replacement for the current RTS legacy system) will probably not be developed and fully implemented for several years.

- Further delaying the expansion and implementation of additional Internet transactions will place Texas further behind other jurisdictional solutions.

H. Recommendations

This section presents our go-forward recommendations for achieving increased use of the Internet and other technologies in performing vehicle titling and registration transactions. It also summarizes related recommendations in terms of changes in the overall VTR business model and in the revenue sharing formula between TxDOT and its county tax assessor partners.

These recommendations were developed based upon evaluation criteria established during the Risk Analysis phase of the audit. Each recommendation was appraised against a set of criteria that indicated its impact to TxDOT's mission, scope, and function as well as the impact to its customers and partners.

Exhibit IV-7 summarizes these recommendations and presents the suggested timelines for implementing the various recommendations. Each of the recommendations is then described in further detail below.

Exhibit IV-7: Internet and Other Alternative Service Delivery Recommendations Timeline Chart

Recommendation	Within 12 months	Within 24 months	Within 36 months
Seek statutory changes to allow increased use of the Internet and other technologies		✓ - During next legislative session	
Renegotiate existing TxOnline agreement	✓ - Negotiate changes	✓ - Seek statutory changes as/if required	
Eliminate convenience fees		✓ - Seek any statutory changes required	✓ - Implement as new Internet applications come online

Recommendation	Within 12 months	Within 24 months	Within 36 months
Implement priority Internet applications in the current RTS environment but with portability to the future Vision 21 environment. Suggested applications include a Web-based temporary tag application; online dealer titling and registration; true Internet-based renewal/address changes and electronic lien and title			✓ - Phased over this timeframe as individual applications completed
Work with county assessor-collectors to design and implement new revenue sharing model which compensates county assessors at a higher rate for transaction processed, but does not compensate them for processing Internet-based applications	✓ - Design new revenue sharing model	✓ - Seek statutory changes as required	✓ - Fully implement as new Internet applications come online
Work with the county assessors to define and implement a service level agreement between TxDOT VTR and the county tax assessors	✓ - Design		✓ - Fully implement as new Internet applications come online
Continue to work with the county assessors to evaluate the feasibility of performing additional transactions in the county offices and implement those strategies deemed viable by VTR and its county partners		✓	
Continue to monitor and assess the viability of other technologies and alternative service delivery channels		✓	✓ - Ongoing as part of overall Vision 21 deployment

1. Seek statutory changes to allow increased use of the Internet and other technologies

These proposed statutory changes include:

- Dye Management Group, Inc. recommends that TxDOT seek statutory changes to enable VTR to implement a statewide Internet-based registration program which does not require any processing to be performed by county tax assessor-collectors.
- Dye Management Group, Inc. recommends that TxDOT seek statutory changes necessary to enable VTR to establish a direct relationship with the dealer community to implement an optional online dealer titling and registration program which does not require the involvement of county tax assessor-collectors.

2. Renegotiate the existing TxOnline agreement to reduce the fees paid by TxDOT

With the likelihood of VTR transaction volumes increasing by millions of transactions each year, Dye Management Group, Inc. recommends that TxDOT negotiate with the Department of Information Resources (DIR) and DIR's third-party partner for a reduction in the current fees. These fees do not reflect the potential volumes of transactions that could be processed nor are they consistent with the cost of similar statewide portals in other states.

TxDOT should also analyze the costs for establishing, operating, and maintaining an Internet portal that will process the numerous Internet transactions that are projected by VTR for future implementation. TxDOT can then use the results of this analysis as the basis for renegotiating with TxOnline and, if reasonable reductions are not offered, to look for alternatives or request a waiver from the Texas Legislature during the session of VTR's participation in the TxOnline program.

3. Eliminate convenience fees

The Internet is usually a low- or lowest-cost service delivery channel. Consequently, Dye Management Group, Inc. recommends that VTR should encourage customers to use the Internet, rather than penalize them with additional fees in order to use the Internet. The convenience fees should be eliminated. To accomplish this, TxDOT should work with legislators and legislative staff in order to seek the necessary changes in statute from the next session of the Texas Legislature.

4. Implement priority Internet applications in the current RTS environment but with portability to the future V21 environment

Based on these recommended statutory changes, Dye Management Group, Inc. recommends that TxDOT implement priority Internet applications in the current RTS environment but with portability to the future V21 environment. These applications should be designed and implemented as 'plug-ins' to the current RTS environment but built in such a way so as to support portability to and compatibility with the next generation environment to be implemented through Vision 21. This will allow VTR to meet current legislative mandates in the case of temporary tags and begin to achieve improvements in customer service and the significant benefits and return on investment of Internet transaction processing, while continuing to design and implement the full Vision 21 environment.

The audit team concurs with the V21 concept as described in the Vision 21 Business Case and as indicated earlier in this chapter, there are many potential Internet applications that have been implemented in other jurisdictions. The audit team agrees that VTR should concentrate now on those applications that provide the opportunity for further cost reduction or revenue gain, as well as providing customer service processing improvements. This would include the following applications:

- Web-based temporary tag application.
- Online dealer titling and registration.
- Internet-based application for registration renewal which bypasses county offices.
- Internet-based electronic lien and title application.

The scope of each of these applications is described in further detail below.

All four of these applications should be designed and implemented as 'plug-ins' to the current RTS environment, but be built in such a way to support portability to and compatibility with the next generation environment to be implemented through Vision 21. This will allow VTR to meet legislative mandates in the case of temporary tags and begin to achieve the significant benefits and return on investment of Internet transaction processing, while continuing to design and implement the full Vision 21 environment.

In developing these applications, Dye Management Group, Inc. recommends that TxDOT adhere to the following guidelines:

- Continue to involve stakeholders**,** such as county assessors and vehicle dealers, in the planning for, design and implementation of these applications. During this study, both county assessors and vehicle dealers expressed an interest in participating and being involved in discussions concerning the development of an Internet strategy.

- Implement services based on best practices**.** The Internet strategy and TxDOT's plans for implementation should incorporate the best practices that were mentioned earlier in this document. These practices include concepts such as designing a common look and feel across all Internet solutions, reviewing processes in advance to simplify and streamline where possible, and using a common access code or account with a common password to access multiple transactions. We suggest that the four tenets used by Arizona should also be considered for adoption; namely to - 'keep it simple, make it easy, make it quick' and 'focus on the customer, not technology.'
- Provide Internet services statewide on a consistent basis so that all TxDOT customers can take advantage of a greater choice of services and the added convenience offered by the Internet. Negotiate with county assessors to develop a memorandum of understanding that assures Texas customers, wherever they reside, that they will have the choice to use VTR Internet services if they so desire.

a. Web-based temporary tag application

The audit team recommends that VTR implement an Internet-based Temporary Tag Program as required by SB11. This will create a Temporary Tag Program that uses an Internet link between dealers and VTR. The creation of this link may form the foundation for other dealer applications that will use the Internet. Ultimately we recommend that TxDOT's implementation of the Temporary Tag Program become fully integrated into VTR's vehicle registration system.

b. Online dealer titling and registration

Dye Management Group, Inc. also recommends that VTR implement an Internet-based dealer titling and registration system to reduce administrative costs for both VTR and the vehicle dealers. It should also generate revenue gains from reduced turnaround times in the registration and titling processes. We believe the implementation of an electronic lien and titling system, in conjunction with the dealer titling and registration system, will provide additional benefits and recommend its implementation.

As the first step in this effort, the audit team recommends that VTR initiate a study to evaluate the options for the dealer system including whether a mandatory program, mandatory program for larger dealers or voluntary participation is the optimum approach for Texas. Stakeholders, such as the vehicle dealers and county assessor-collectors should participate in this study.

c. Internet-based application for registration renewal which bypasses county offices

The audit team recommends that VTR implement enhanced registration renewal and address change transactions whereby the processing is completely automated and bypasses any involvement by the county offices. Whereas today, the county offices take information entered by customers on the Internet and verify and finalize the transaction in RTS, the new Web-based application would interface directly with RTS and would be processed without involvement by county staff.

Counties would not receive any processing fees for these transactions. These registration transactions, however, would enable the counties to continue to collect county revenue, such as the road and bridge fees. VTR would collect these fees for the counties for Internet transactions. There would be no convenience fee associated with these transactions and, to gain maximum savings, VTR should promote the use of the service.

d. Web-based electronic lien and titling application

This application would be part of the introduction of electronic lien and titling (ELT) to replace the current paper intensive system and would help to comply with legislative mandates to implement this application. The implementation of such a system would significantly reduce or eliminate the need for certified title copies, which is the largest volume transaction now handled by VTR regional offices. However, there will still be a requirement for state-sanctioned copies of titles. As no special security paper or other equipment is likely to be required, it is quite possible title copies could be provided to an authorized customer via the Internet, thereby reducing the potential walk-in volumes in either VTR regional offices or county offices.

5. Work with the county assessors to develop and implement a new revenue-sharing formula which compensates county assessors at a higher rate for transaction processed but does not compensate them for processing Internet-based applications

Dye Management Group, Inc. recommends that VTR establish a joint TxDOT and county assessor work group to define, develop, plan for the implementation of and manage transition to a new revenue sharing formula. The goal of this work group will be to develop and implement a new revenue-sharing formula that compensates county assessors at a higher rate for transaction processed, but does not compensate them for processing Internet-based applications.

The audit team believes that the first activity of this study team should involve a detailed survey of large, medium, and small county offices to establish whether the current compensation for processing vehicle registration and titling cover operating

costs for providing those transactions. The second step by this work group should then be to evaluate the adjustments that need to be made to registration and titling fees to compensate county offices for their VTR transaction work, when the impacts associated with the expansion of Internet services and transactions are taken into consideration.

Based on the analysis performed by our study team during the audit, we believe a fair an equitable approach would be a fee structure that compensates the county assessors at a slightly higher rate for all transactions actually performed by the county offices, but does not compensate the counties with a transaction fee for the Internet transactions that they would not actually process under the new Internet application. Our analysis suggested compensation to the counties in the range of $3.25 for transactions actually processed in the offices may be appropriate (please refer to Section IV.F.4.a).

6. Work with the county assessors to define and implement a service level agreement between TxDOT VTR and the county tax assessors

Dye Management Group, Inc. recommends that VTR work with the joint TxDOT and county assessor work group to develop a service level agreement between VTR and its county partners, identifying the expectations of both parties. This would include the commitment to provide services, monetary arrangements as identified through the revised revenue sharing model and other contract provisions. The agreement should also address items such as the requirement that Internet services be offered to all customers on a statewide basis.

The service level agreement should be developed initially by the joint work group and then presented to the Texas Transportation Commission and all of the county tax assessors across the state for discussion and ratification. TxDOT should then request statutory changes from the Texas Legislature during the next session as required to support and fully implement the jointly developed agreement.

7. Continue to work with the county assessors to evaluate the feasibility of performing additional transactions in the county offices and implement those strategies deemed by viable by VTR and its county partners

Dye Management Group, Inc. recommends that VTR work with the recommended county assessor task force to determine the feasibility of authorizing additional services for county offices to perform to reduce the impact of Internet transaction expansion activities. The audit team believes these discussions with the county assessors should include the following:

- Reviewing the feasibility of processing additional state-sanctioned title copies at county offices after implementing an electronic lien and titling system, and if so, determine the likely volumes of work and the compensation the county should receive for processing those transactions.
- Determining whether county offices wish to pursue the opportunity of overdue fines collection and, if a positive commitment is received, review the feasibility and assess the practicality of being able to link the various systems required to implement fines collection for both state and local governments.

8. Continue to monitor and assess the viability of other technologies and alternative service delivery channels

The study evaluated the potential for VTR services being provided via additional new delivery channels. At this time, the audit team recommends that VTR concentrates its efforts on implementing Internet-based services. Dye Management Group, Inc. does recommend the following actions in terms of other alternative service delivery channels:

- Electronic kiosks are an option for processing certain transactions, such as registration renewals, in high-traffic locations. Should one or more of the counties wish to install the kiosks, with third parties providing the hardware and software, VTR should work with the county partners to determine the viability of electronic kiosks as a viable delivery service channel and facilitate implementation as appropriate.
- VTR should monitor any developments in cellular phone technology and, as Internet services develop and proliferate, determine whether cellular phone services should be developed in tandem.

In conclusion, the recommendations for increasing the Internet use for VTR transaction activities bring both opportunities and challenges. The opportunities include improved customer services through additional choices and improved convenience, along with opportunities to both increase revenue and reduce costs of state government. The challenges include renegotiating the TxOnline agreement and developing a memorandum of understanding with the county assessors.

V. Study Area #4: Opportunities for Consolidation of Call Center Functions Currently Performed Across Various TxDOT Customer Facing Units

■

The Texas Department of Transportation (TxDOT) has a number of traditional and non-traditional call center functions performed across various TxDOT customer-facing units, organized in a variety of configurations. During the initial risk assessment process, the audit team identified and documented the following multi-program risk:

- **MP1**: Limited coordination or economies of scale in management of call center capabilities across divisions.

To address this risk in more detail, the audit team defined a study area to assess the potential consolidation of some or all call center functions currently performed in individual business units. As part of this assessment, the team identified and evaluated the requirements and risks associated with consolidating call centers. This section documents our analysis approach, the results of this analysis and our key findings and recommendations concerning TxDOT's call center operations.

A. Summary of Findings and Recommendations

As part of this study area, the Dye Management Group, Inc. audit team conducted an in-depth review of all call center functions currently performed in individual units. Interviews with management, staff, and external stakeholders were conducted to obtain a detailed overall interpretation of the facts and issues that were facing the employees and clients of the department.

A stakeholders group consisting of TxDOT management and staff and external stakeholders was convened to review audit findings and to provide guidance and input to the audit team. The stakeholder group reached a consensus opinion that the findings gathered by the audit team accurately represented the functional processes, procedures, and pertinent issues of the call center operations in TxDOT. These key findings are presented in detail in the following pages but are generally summarized as follows:

- All call centers operate independently and utilize different vendors, equipment, software, features, policies, processes, and procedures.
- Divisions do not generally collaborate on best practices and process improvements.

- The volume of calls and contacts have been increasing relative to staffing levels and operating budgets, increasing the strain on the call center functions and impacting overall customer service levels.
- There is a multitude of agency phone numbers. While established and regular agency customers know how to reach the specific agency program staff they need to contact in order to access services, many first-time and individual customers do not have a one-stop entry point for 'Level 1' services.[3]
- Customer accessibility to functional agency resources, such as phone numbers, basic information, agency web site information, etc. varies considerably.
- The various TxDOT divisions, that manage call centers, do not generally have regular/formal customer feedback processes such as customer surveys, customer/user advisory groups, etc.
- There is no consistent agency-wide performance management and measurement process for call center operations.
- TxDOT has made efforts to plan for and effectively execute state emergencies through improvements to its Highway Condition Reporting System (HCRS) and has developed plans to employ TxDOT program area staff as back-ups to the Travel Information Center staff in the event of an emergency.
- There is no agency-wide coordinated plan or significant division-level plans for individual call center disaster recovery.

Recommendations were then developed based upon these findings and analysis of a set of detailed models of various approaches to performing call center functions that had been reviewed by the stakeholder group. These recommendations are presented in detail in the following pages but are generally summarized as follows:

- TxDOT should implement consolidated/coordinated planning and procurement for its call center functions. This includes:
  - Establishing a multi-division Call Center Planning Group to provide policy guidance and direction.
  - Establishing TxDOT call center standards and a recommended call center architecture and migrating individual call centers to this standard architecture as upgrades are initiated.

[3] For purposes of this review, the following definition of Level 1 calls was used:
- Answering very basic agency and program questions (e.g. about what the agency does, which functions/services it performs/provides, mailing addresses, phone numbers, web site addresses, access to basic literature, etc.)
- Complaint intake (i.e. complaints on the agency and the call centers themselves and not licensee/permitee-related complaints).
- Providing jurisdictional referrals/routings to other programs/divisions within the agency for Level 2 support.
- Providing automatic or operator-assisted referrals to other federal, state, or local agencies (and other entities) for non-jurisdictional questions/issues.
- Any other services the TxDOT call center planning group determines properly aligns with this category of calls.

- TxDOT should design and implement a consolidated and coordinated TxDOT call center number and portal, that would have the following features:
  - A 1-800 number answered by an intelligent interactive voice response (IVR) capability programmed to answer the most frequently asked questions about TxDOT in general and each of the TxDOT program areas.
  - Automated routing through the IVR to either a Level 1 customer service function or a specific program call center based on information provided by the caller.
  - A Level 1 call center or customer service function staffed through the existing Public Information Office (PIO) and Travel Information Centers.
  - Direct program-specific phone numbers maintained for use by those customers who already have existing relationships with one or more program areas and know the specific area in TxDOT they want to contact.
- TxDOT should implement customer advisory groups and feedback processes for call centers in all divisions.
- TxDOT should implement agency-wide and division-specific performance measures as appropriate and report on these measures on a monthly/quarterly basis.
- TxDOT should continue the ongoing effort to strengthen its web site to improve the customer's ability to easily access key information, thus potentially reducing the number of general information calls received. This should be accomplished by assuring information is readily displayed on TxDOT's newly designed web site including incorporating basic program information, developing frequently asked questions (FAQ) sections, and ensuring that all links on web sites are functional.
- The agency should continue efforts underway to increase the accuracy, timeliness and accessibility of HCRS data to support emergency operations.
- TxDOT should establish disaster recovery plans for each program call center. The exact strategies may differ between individual program areas, depending on the specific business criticality of each function.

The remainder of this chapter describes our analysis of this study area in more detail. It includes the identification of alternatives for consolidating call center functions, an assessment of the relative merits of each alternative, and a recommended approach for proceeding. As part of the analysis of each alternative, the audit team reviewed the capability under each call center model to support emergency operations. A transition strategy was developed for the recommended approach, with a cost estimate and risk assessment including steps for mitigating any identified risks. It also includes a review of best management practices and a summary of program activities by other peer states, the federal government, and the private sector; a detailed discussion of the various programmatic alternatives reviewed by the audit team, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

The International Customer Management Institute defines a call center as follows: A call center is "an umbrella term that generally refers to reservations centers, helpdesks, information lines, or customer service centers, regardless of how they are organized or what types of transactions they handle." This definition of a call center is intended to be quite broad because in practice calls are just one type of transaction that may be handled and "the word 'center' doesn't accurately depict the many multi-site environments." [4]

Based on this definition of a call center, that was accepted by the stakeholder group, TxDOT has a number of call centers throughout its operational units. As Exhibit V-1 below shows, these centers are situated in six divisions and located on the Camp Hubbard, Riverside, and Bull Creek campuses in Austin, TX, except for the Medical Transportation Program, that is located in three facilities/cities throughout the state and the PIO call center that is located in the Greer Building in Austin, TX.

Exhibit V-1: TxDOT Call Centers—Division and Program Structure and Locations

TxDOT Division	Call Center Program Areas and Locations
Motor Carrier	1. Motor Carrier Operations Section (Credentialing, MCO Help, Public Assistance) —Austin 2. Permits Section—Austin
Motor Vehicle	1. Dealer Enforcement—Austin 2. Lemon Law—Austin 3. Dealer Licensing—Austin
Vehicle Title and Registration	1. Registration and Title System (RTS) support to counties—Austin 2. Customer Call Center—Austin 3. Salvage Dealers Licenses—Austin 4. International Registration Plan—Austin 5. Special Plates—Austin*
Medical Transportation	1. San Antonio—Youth 2. McAllen—Adults 3. Dallas—Adults
Travel	1. Highway Condition Reporting System (HCRS)—Automated Response, and staff stationed in 11 of the 12 Travel Information Centers (TICs) around the state 2. Texas Travel Information and Literature Requests—12 Travel Information Centers (TICs) around the state 3. *Texas Highways* Magazine Subscription/Customer Service—Private vendor

[4] Call Center definition secured from the following site for the ICMI Call Center Glossary: http://www.incoming.com/Glossary/s2glossary25.aspx?SelectedNode=Glossary

TxDOT Division	Call Center Program Areas and Locations
Government and Public Affairs Division (Public Information Office)**	General Agency Information and Media Contacts—Austin

*Note: The issuance of special plates is scheduled to be transitioned to the county assessors collectors by the end of 2007.

**Note: On June 1, 2007, TxDOT Executive Director Michael Behrens issued a memo announcing the merger of the Public Information Office (PIO) and TxDOT's Government and Business Enterprise (GBE) Division into a new division, the Government and Public Affairs Division, effective July 1, 2007.

These call centers provide a variety of services to specific classes of customers such as businesses and local elected officials and to the general public, with bilingual and TDD access for Spanish-speaking and hearing-impaired customers. These services fall into the following three broad categories, with typical service examples noted:

1. Transactional services (e.g., oversize/overweight permits, dealer licenses and credentialing, vehicle titles and registrations, medical transportation scheduling, complaints against licensees, requests for travel literature, etc.).
2. Help desk services (e.g., direct assistance to businesses, licensees, vehicle owners, and counties, etc.).
3. Public information services (e.g., general agency and program questions, travel condition inquiries, etc.).

Exhibit V-2 below illustrates that these centers serve a very large number of customers each year and represent a sizable combined operational profile in terms of budget and FTEs.

Exhibit V-2: TxDOT Call Center Operational Profiles

Tx Call Center Program	FY 2006 Annual Operating Budget	FY 2006 FTEs	FY 2006 Customers Served
Motor Carrier	$6.3 million	10 54*	159,805 calls in credentialing and public assistance and 132,608 calls for permit and specialty requests and helpdesk calls **)
Motor Vehicle	$230,000	5	97,161 calls

Tx Call Center Program	FY 2006 Annual Operating Budget	FY 2006 FTEs	FY 2006 Customers Served
Vehicle Title and Registration	$1 million	30	280,682 calls in the VTR call center and 83,321 calls in the RTS help desk
Medical Transportation	$7.8 million	132	2.0 million calls
Travel	$380,000***	11***	327,238 automated road condition calls and 55,441 TIC answered road condition, travel information, and other calls****
Public Information Office	<$100,000	1 (with back-up from other staff as needed)	21,000 (estimated)

* Includes the personnel needed to process permits. FTEs devoted to processing calls cannot be determined but the vast majority of personnel are devoted to processing faxes and Internet requests.

** Phone, fax, mail and Web-based permit applications processed total 522,638. There may be multiple permits and/or credentials produced as a result of one phone contact (or one fax/mail for permits).

*** This figure represents the salaries of the 11 estimated staff members answering calls.

**** In addition, Travel Information Center staff answers 32,268 calls originating from individual TIC phone lines.

All call centers have Automatic/Automated Call Distributor (ACD) systems and a variety of equipment, software, operational and management data, and reporting systems, except for the Public Information Office (PIO) that has a very basic multi-line PBX system. All of the call centers have centralized physical operations in Austin or around the state, except Travel, that has a single 1-800 number that is routed to Travel Information Center (TIC) counselors throughout the state.

The subsections below provide a brief overview of the call center operations and functions in each program area as well as a summary of the technical operating environment for each call center.

1. Motor Carrier Division (MCD)

The Motor Carrier Division's (MCD) call center operations operate within two sections—the Credentialing (CRD) unit in the OS/OW Permits Section, and the Public

Assistance (PA) unit in the Motor Carrier Operations (MCO) Section, that are collectively accessed through what is termed the Motor Carrier Division One-Stop-Shop Unit.

The Permit Section and CRD unit serve motor carriers by issuing oversize/overweight permits and ensuring proper credentialing of motor carrier business operations. The PA unit handles calls from motor carriers and the general public regarding complaints against motor carriers and other general program and agency questions. Complaints are also received via fax and e-mail. The PA unit performs initial desk investigations of complaints received and, for investigations that cannot be resolved, complaints are passed on to the Investigation unit for an on-site field investigation. These sections and units operate as a 'multi-channel contact center,' whereby customers can reach the division by phone, fax, and online, with the majority of the contacts being conducted online.

MCD has the most fully developed use of Web-based functionality of all of the call centers. Customers can download forms, submit applications/fees, self-issue permits, conduct status checks, and obtain other critical regulatory and business information. In 1986, some consolidation occurred in MCD's customer service operations when district offices operations were consolidated into the Austin-based call center.

2. Motor Vehicle Division (MVD)

The MVD Information Center facilitates customer service for motor vehicle licensees as well as complainants and the public. The MVD Information Center responds to inquiries pertaining to a specific dealer license, renewal, or complaint, including 'Lemon Law' filings.

3. Vehicle Title and Registration (VTR)

VTR's Customer Service Call Center answers telephone inquiries from the general public, local law enforcement, and other entities about Texas' motor vehicle registration and titling requirements and issues. The primary callers are the 20 million-plus registered vehicle owners in Texas. Customer service agents provide the following services:

- Information dissemination on vehicle title, registration, policies, and procedures.
- Navigation assistance with TxDOT's web site.
- Verification of motor vehicle records and title processing/issuance status.
- Referral/routing to subject matter experts as a last resort.

In addition to the Customer Service Call Center, VTR operates a Registration Titling System (RTS) Helpdesk that provides telephone-based technical assistance and support for the automated Point-of-Sale Registration and Title System application and

associated hardware. Users of RTS include staff in the 254 Texas county tax assessor collector offices, 16 VTR field offices, and VTR headquarters. The RTS Help Desk fields calls regarding RTS procedures, functional problems, and system defects.

4. Medical Transportation Program (MTP)

MTP receives calls from Medicaid clients of all ages and other eligible youth and adults (including children with special health care needs and indigent cancer patients) seeking the scheduling of transportation services to and from a non-emergency medical provider. MTP maintains contracts with public, non-profit, and private transportation providers around the state and registers individual drivers to provide localized/regionalized services. The program also works with social workers and health care providers.

The program was transferred to TxDOT from the Texas Health and Human Services Commission (HHSC), which operated multiple call centers around the state. MTP operates under specific federal program requirements, guidelines stemming from the *Frew v. Hawkins* lawsuit settlement, and HIPAA regulations, and is subject to oversight by HHSC as the State of Texas' cognizant Medicaid agency.

When the MTP program was transferred to TxDOT, the department consolidated the ten original call centers down to nine, and most recently, down to three centers located in McAllen, San Antonio, and the Dallas area The specific process established for scheduling, arranging, or reimbursing medical transportation requires detailed operator-assisted intake and eligibility determination. MTP staff provides the following services:

- Intake/application processing.
- Service authorization/denial.
- Complaint processing.
- Scheduling of transportation services.
- Information dissemination.
- Technical assistance.
- Reimbursement status.
- Verifications (of kept appointments).

Note: As a result of SB10 passed during the most recent legislative session, MTP is scheduled to be transferred back to HHSC as of September 1, 2007.

5. Travel Information Centers (TICs)

Calls from the motoring public and others are received and answered in the Travel Information Centers (TICs) by counselors who provide a wide variety of travel

literature, trip-routing, travel counseling, oversize/overweight permit information, and temporary license services. In addition, TIC counselors also answer the 1-800 road condition and travel information phone line as well as assist in other TxDOT programs. Counselors in the 11 TICs around the state operate during regular business hours. Calls to the 1-800 number are evenly routed/distributed through Austin to the TICs. Calls include requests for a live operator from the automated Highway Condition Reporting System (HCRS). The HCRS is staffed by one to two counselors in each TIC 24 hours a day during emergencies. In addition to calls routed through the 1-800 number, the TICs also process calls that originate locally and serve walk-in customers.

In the early 1990s, road condition information was automated and callers who chose to speak to a person were directed to a call center in Austin. In 1997, the call center in Austin was eliminated and the calls were disseminated to the TICs around the state. This 'deconsolidation' or virtual call center approach resulted in the elimination of FTEs and reduced overhead costs.

The Travel Division is in the process of further upgrading the 1-800 road condition and travel information service by providing an Interactive Voice Response (IVR) system for road condition calls. However, callers will still be able to talk to a travel counselor during regular TIC operational hours.

6. Public Information Office (PIO)

PIO receives and directs calls, answers basic agency questions, and documents official complaints. Calls are from local, state, national and international sources that are uncertain about where to direct their particular questions and from people who are frustrated about the telephone wait times in other divisions.

C. Risk Identification and Assessment

Exhibit V-3 provides a summary of the multi-program risk identified during the initial risk assessment, which was included in this study area for additional analysis. This risk is then described in further detail below.

Exhibit V-3: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Multi-Program	Limited coordination or economies of scale in management of call center capabilities across divisions	High	• Potential duplication of services • Potential duplication of expenses • Loss of economies of service due to independent system programming and design • Potential reduction of customer service access and performance levels

The various call centers operate independently and provide divergent services to varying customer groups. While the call centers and related programs often work with each other and make customer referrals to different divisions and programs, their work does not generally overlap. However, the basic call center function of answering calls and providing customer assistance is similar across all call center operations. The major risks noted in the above exhibit are associated with the divergent/decentralized approach that has evolved within TxDOT over time and represent lost cost savings and performance-related opportunities to consistently measure and manage performance, coordinate operations to make them more efficient and accessible to customers, and make unified procurement decisions.

Due to budget and FTE limitations, the call centers rely heavily on automation technology to achieve performance/productivity gains and absorb workload increases. However, there are limits to the ability of this strategy alone to manage workload increases. Nonetheless, new technologies and techniques are a viable strategy, which makes effective planning for and coordination of their procurement and implementation a necessary condition for improved economies of scale and long-term success.

There appears to be limited coordination currently between divisions or effort to gain economies of scale between the call center operations of the various divisions. Opportunities for further integration of the call center functions could include:

- Joint planning and/or acquisition of call center technology to provide a common architectural footprint. This would reduce the complexity of the TxDOT application environment and facilitate interoperability of the call centers in a hurricane evacuation or other emergency.

- Establishment of a TxDOT customer service function that would have responsibility for providing Level 1 support (the most frequently asked questions in each program area – please refer to Section V.H.2 for a more complete definition) and routing only the more complicated inquiries to program specialists in each division. This scenario could allow TxDOT to reduce the overall cost of its call center functions by better leveraging staff assigned to call center functions and the cost of technology required to support these functions.

In TxDOT, many of the program areas with call centers (i.e., Vehicle Title and Registration, Motor Carrier, Motor Vehicle, and Travel Divisions) report in at the Deputy Director level. The Deputy Director, however, has a number of responsibilities beyond managing these program areas, as this position effectively equates to the chief operating officer of the department. As such, this position is not able to devote the time required to ensure that there is effective cross-coordination and shared strategic, business, and technology planning between the various functions. The recommendations contained within this report chapter offer strategies to help improve this coordination and oversight.

D. Audit Analysis Approach

To further study and analyze the risks included in this study area, the audit team established a technical working-group of stakeholders to provide guidance and input to the audit team. This stakeholder team consisted of TxDOT management and staff responsible for managing the elements of the study area and one external stakeholder/call center customer. Those participants serving as members of the call center stakeholder group included:

- The Honorable Deborah Hunt, Williamson County Tax Assessor Collector and RTS Call Center Helpdesk customer.
- Mitch Pope, TxDOT Information Services Division.
- Brenda Harper, TRV Travel Services Section Director.
- Melissa Wilson, Supervisor, Waskom, Texas TIC.
- Kathy Murphy, TRV Publications Section Director.
- Cynthia Kosel, *Texas Highways* Magazine, Circulation Manager.
- Ray Hutchinson, Manager, MCD Oversize/Overweight Permits Section.
- Pamela Carter, Supervisor, MCD Oversize/Overweight Permits Section.
- Lois Johnson, MCD Technical Support Supervisor and Information Resource Administrator.
- Michael Dewbre, Supervisor, MCD Public Assistance Branch.
- Dawn Heikkila, MVD Division Administrative Manager.
- Jennifer Murdock, Team Lead, MVD Information Center.
- Ann Zeeck, PIO Information Specialist.

- Richard Bondi, MTP Special Projects Coordinator.
- Jessica Gonzales, MTP Dallas TSC Coordinator.
- Russell Armstrong, MTP McAllen TSC Coordinator.
- Harry Morgan, Director, VTR Customer Services Section.
- Johnny Manns, Manager, VTR Systems Services Branch.
- Phyllis Galloway, Supervisor, VTR Call Center.

In addition, all division directors were considered ex officio members of the stakeholder working group and were invited to all group meetings. These include:

- Doris Howdeshell, TRV.
- Carol Davis, MCD.
- Brett Bray, MVD.
- Randall Dillard, PIO.
- Eric Gleason, PTN.
- Rebecca Davio, VTR.

Our audit analysis approach, which was executed in conjunction with this stakeholder team, consisted of the following work steps:

1. Performing an analysis of the current call center operations in each of the customer-facing units through follow-up interviews of TxDOT staff and call center customers where practical, a review of call center operating statistics, a review of existing call center procedures, a review of the existing and planned call center technology environment and site visits of the call centers.
2. Conducting a review of best practices and lessons learned from other peer states, the federal government, and the private sector.
3. Identifying various alternatives for call center operations for additional analysis and evaluation, reviewing these proposed alternatives to be studied with stakeholders and adjusting this list of alternatives as appropriate based on any stakeholder input received.
4. Preparing a detailed analysis of each of the identified service delivery alternatives and reviewing our general findings and the analysis of these alternatives with the stakeholders.
5. Establishing our specific recommendations, developing a transition strategy for implementing these recommendations and documenting these recommendations in this report chapter.

Work in this study area involved conducting detailed interviews with a number of TxDOT staff, external stakeholders, and other resources as well as conducting site visits of the various call centers. Exhibit V-4 summarizes these interviews and site visits by role and function.

Exhibit V-4: TxDOT Interviews and Site Visits Conducted

Name	Role	Function
Mitch Pope	TxDOT, Information Services Division (ISD)	Interview: Follow-up questions on ISD call center services and related systems, hardware, and software operational and procurement issues
The Honorable Deborah Hunt	Williamson County Tax Assessor Collector	Interview: Customer service and operational issues with VTR Customer Call Center and RTS Helpdesk
Scott Alley	State emergency operations representative, TXDOT Maintenance Division	Interview: Emergency operations and related call center support issues
Various staff	Medical Transportation Call Center in San Antonio, Texas	Site visit of call center
Various staff	Motor Carrier Division Permits, Credentialing, and Public Assistance Call Centers in Austin, Texas	Site visit of call center
Various staff	Motor Vehicle Division Call Center in Austin, Texas	Site visit of call center
Various staff	Vehicle Title and Registration Call Center in Austin, Texas	Site visit of call center
Brenda Harper	TRV Travel Services Section Director	Interview: TRV call center operations and HCRS
Jack McElaney	Vice President of Sales and Client Services, E Communication Advantage (founding member of Austin Contact Center Alliance—ACCA)	Interview: ACCA services provided and best practices

In determining the audit analysis approach, a question was raised regarding the definition of a call center and the proper scoping of the audit. Dye Management researched this issue and presented to the stakeholder group the definition of a call center as outlined in Section V.A, which was developed by the International Customer Management Institute.

The stakeholder group validated and accepted this definition, thereby causing all of the initially identified call center operations to be included in the scope of the audit. However, some of these call center operations were not the subject of detailed review as part of this study area, although the recommendations developed within the study area may likewise be applicable to some or all of these functions. The program areas, which were not studied in detail as part of this study area and the rationale for exclusion, include the following:

- Salvage Dealers Licenses and International Registration Plan operations were excluded from the detailed analysis due to their small size. However, PIO was

included, despite its small size, because of its pivotal role operating the agency's main central switchboard and because it may form the basis for a single agency portal number (please refer to Section V.H.2).

- Special Plates operations was excluded because responsibility for issuance of special plates is scheduled to be transitioned to county assessors-collectors by the end of 2007.
- The *Texas Highways* Magazine Subscription/Customer Service operations was excluded because it involves activities that are not core government functions and that mirror private sector services. In addition, this function was privatized in 1999 and is currently managed by a third-party out-of-state vendor (Kable Fulfillment Services, Inc.) that specializes in magazine customer service and fulfillment. In addition to providing customer phone assistance, this vendor also handles all data entry, mails all renewals and invoices, uploads labels to the magazine printer, maintains online services, and supplies a comprehensive circulation and marketing reporting package unique to magazine management.

These excluded programs may nonetheless benefit from and should be assessed as to the applicability of the recommendations in Section V to their program functions.

E. Best Practices Survey of Other Call Center Operations and Resources

As part of our analysis effort, Dye Management Group, Inc. conducted a survey of other states, the federal government, and the private sector in order to determine the service delivery approaches utilized for call center functions. The goal of this survey effort was to better understand the success of different approaches around the country and to identify and document best practices and lessons learned and assess their applicability to TxDOT. The review focused primarily on identifying solutions related to the identified risk (i.e., "Limited coordination or economies of scale in management of call center capabilities across divisions"). The purpose of the review was to focus on a few best practices that were applicable to the issues under the scope of this review area and not a broad, detailed analysis of all possible strategies that TxDOT might employ. This task was performed through a literature search, a number of follow-up telephone contacts, and several detailed telephone interviews with industry stakeholders and peer states.

States targeted for the survey effort included state agencies that were either similar in size and/or scope to TxDOT or had technology initiatives that were adaptable to TxDOT's call center operations. The states surveyed were Arizona, Florida, New Jersey, North Carolina, Oregon, and West Virginia.

The audit team also performed an Internet literature search, and discussed current call center practices with the Austin Contact Center Alliance (ACCA), national/federal entities such as the National Performance Review, numerous private sector entities, and, where possible, other state agencies. The best practices review focused on ACCA (which, besides

TxDOT, has other state agency members such as the Comptroller of Public Accounts and Texas Parks and Wildlife Department), federal, and private/non-profit sector efforts/experiences as well as on articles/reports in the professional/business literature. Key findings from these various sources are summarized below.

1. There is a growing use of virtual call centers via telecommuting from home or remote locations

While much has been written about recent trends in physical consolidation and outsourcing of call center operations, the trend toward virtual techniques is also pronounced. These techniques provide obvious advantages in urban areas and or in more isolated rural communities where commuting can be a costly and time-consuming challenge due to heavy traffic or geographical dispersion. Likewise, a virtual call center can offer an opportunity to manage limited workspace. If properly planned, supervised, and supported, these strategies also can result in staff productivity gains. A virtual call center approach can also be an integral component of a call center's disaster recovery plan.

2. There are efforts to minimize outbound calls, multiple transfers, and call-backs to improve staff productivity and the customer service experience

These strategies reflect basic, long-standing, and generally accepted operating procedures. They serve to improve the customer experience and staff working conditions by minimizing the time required for multiple and incomplete transactions.

3. There is a prevalent and rapidly growing use of speech analytics like interactive voice response (IVR) and Voice-over Internet Protocol (VoIP)

Interactive voice response, or IVR, is a phone technology that allows a computer to detect voice and touch tones using a normal phone call. The IVR system can respond with pre-recorded or dynamically generated audio to further direct callers on how to proceed. IVR systems can be used to control almost any function where the interface can be broken down into a series of simple menu choices. Once constructed IVR systems generally scale well to handle large call volumes. Voice over Internet Protocol (VOIP), is the routing of voice conversations over the Internet or through any other Internet Proctol (IP) based network.

These technologies have been in use for many years but have reached a level of maturity and functionality in recent years that, if used properly, make them attractive and scalable strategies to offer better customer service (e.g., through 24-hour service) and better utilization of staff and capital assets. These systems also allow for a more efficient division between Level 1 and 2 calls and for better performance tracking.

As an example, the Arizona Department of Transportation (ADOT) makes extensive use of these technologies. ADOT included increasing the number of Internet and IVR transactions and activities to 4.7 million, or an average of 391,667 per month, as a key objective in their FY 2006 strategic plan.

4. There is increased use of Internet/Web-based services for information and transactional purposes

Customer directed strategies are growing in prevalence as more customers have greater access to and expectations regarding Internet-based solutions. The opportunities for 24-hour access and reduced pressure on telephone resources are noteworthy and the reason private and public sector entities, including the Florida Department of Transportation (FDOT) and TxDOT's MCD have deployed such strategies. For instance, FDOT provides, through their GoRenew.com web site, online services including renewing driver licenses; disabled parking placards; identification cards; and vehicle, mobile home and vessel registration renewals.

5. There is growing integration of voice and data systems through computer telephony integration (CTI)

Computer telephony integration or CTI uses software, interfaces, and processes to integrate telephone and computer networks to improve efficiency and seamless customer interactions and reporting. These strategies reduce processing times, call-backs, transfers, and errors and allow for call centers to utilize telecommuting to reduce cost, improve response time, and provide support for disaster recovery.

6. There is growing use of Application Service Providers (ASP) or 'apps on tap' or Software as a Service (SaaS) strategies to provide access to software and/or network applications to minimize up-front costs and reduce internal support requirements

An application service provider (ASP) is a business that provides computer-based services to customers over the Internet or a private network. The specific application software or solution offered by an ASP is often called on-demand software or Software as a Service (SaaS) or applications on tap or 'apps on tap' for short because the application is only used as needed like getting water from the faucet tap. The need for ASPs has evolved from the increasing costs of acquiring and operating specialized hardware and software. As well, the growing complexities of software have led to huge costs in distributing the software to end-users. Through ASPs, the complexities and costs of application software can be cut down. In addition, the issues of upgrading have been eliminated for the end user organization by placing the responsibility on the ASP to maintain up-to-date services, 24 x 7 technical support, physical and electronic security and support for business continuity.

Because of the often high cost of new equipment and software, the length of time required to implement new technologies and the rapidly changing pace of new technology development, many call centers have employed these application and technology outsourcing strategies to improve their ability to save/defer costs, reduce lead times for system upgrades, and more quickly take advantage of new features that can boost productivity and better leverage their limited staff.

7. There is a growing focus on 'customer management' and service

This focus includes customer complaint tracking and handling, customer input (through stakeholder advisory groups and surveys), and monitoring and management of call center operations and performance from a customer's standpoint. This is especially prevalent in the private sector and in the federal sector which has made a major push for customer management starting in the 1990s.

8. Disaster recovery planning has been identified as a best practice although there is generally a lack of disaster recovery planning

Because of the time-sensitive and business-critical nature of many state and private call center operations, disaster recovery planning has been identified as a must-have strategy. ADOT and FDOT both have comprehensive disaster recovery plans with vendors and/or umbrella emergency operations center entities that provide for 24-hour recovery and staff redeployment and that rely on the physical redundancy that decentralization provides.

F. Key Findings

Based on our review of operational statistics, our best practices survey, discussions with TxDOT staff and stakeholders, and our detailed review of various alternatives, this section summarizes our key findings in regards to call center functions. These key findings include the following:

1. All call centers operate independently and utilize different vendors, equipment, software, features, policies, processes, and procedures

The call centers within the various TxDOT program areas operate independently and utilize different vendors, equipment, software, features, policies, processes, and procedures. While many of the units field and route calls and otherwise work with their counterparts in other divisions, these contacts occur at the program or technical level and the nexus between call center operations—in particular the coordination of operational aspects—is not a formal one. This situation makes it difficult for the agency to develop and consistently employ performance and other operational standards and take advantage of economies of scale in procurement, maintenance, and

operations. It also results in lost opportunities for interoperability and cross-program synergies and makes it difficult to provide effective oversight of call center operations.

2. Individual divisions have implemented a number of best practices and process improvements

Individual program area call centers have been deploying new processes and technologies to improve customer service levels and staff productivity. Some of these process improvements include:

- Improvements in internal work flow processes such as the internal phase of MVD's LACE project, that should make it easier to find information needed to respond to customer inquiries.
- Internet-based information, transactional services and self-service capabilities, including MCD's CPS, MCCS and their proposed TxPROS application, and the future external phase of the LACE application proposed by MVD.
- Outsourcing arrangements with customers and partners such as MCD's Remote Permit System (RPS).
- Agent telecommuting that has been adopted by MCD to address space limitations
- MTP's contracted payment of advance funds for qualified recipients and contracted transportation services.
- Participation in industry groups such as MCD's participation in the Incoming Call Management Center (ICMC) and MCD and VTR's participation in the Austin Contact Center Alliance (ACCA).

3. Divisions do not generally collaborate on best practices and process improvements

Innovations by individual divisions or program areas, however, occur largely in isolation because the various divisions do not work together to share best/effective practices or jointly plan hardware, software, or process changes. There is no forum or process in place to ensure that lessons learned or best practices implemented in one program area are diffused to other program areas. The stakeholder group assembled for this audit made this clear. Participants clearly appreciated the stakeholder group as a vehicle to share ideas, discuss issues and learn about capabilities of their call center software that might be in use in one program area but that another program area was unaware might be possible with their own software application.

4. Call/contact and volumes/workload have been increasing relative to staffing levels and operating budgets

Increasing workloads and seasonal spikes in workload are causing significant performance variances. The growth in the state's population has resulted in steady and, in some cases, dramatic increases in workload volumes relative to operating budgets and staff size. Despite noteworthy division-level efforts to absorb this workload within existing resource levels through training, management techniques, technology improvements, and a highly motivated, experienced, and productive staff, agency call center operations may be reaching a point of diminishing returns on these efforts. The department faces the prospect of a significant deterioration in customer service levels over time, many of which are already significantly below industry standards (based on agency input and in comparison with performance standards as noted below in Section V.F.5), unless it is able to collectively address priority goals and plan and deploy new strategies. Without a coherent, coordinated strategy to address the mismatch between resources and workload, there is a risk of a significant degradation in customer services levels, which could negatively impact customers' view of the agency. In addition, there is a substantial risk of industry complaints to policy-makers in some program areas such as motor carriers and motor vehicles dealers as well as a risk of legal liability in other program areas such as medical transportation.

All program areas are experiencing growing workloads. While some program areas have been able to absorb growing workload and even improve performance using new technologies and business process (such as MCD's use of Internet-based and fax systems to receive and process OS/OW permit applications), the long-term trends are toward reduced service levels and potential negative staff morale and retention impacts. The stakeholder group survey responses provided the current status, and trends of call center workloads in various program areas and are as follows:

- MCD's workload has increased by 25% in the last three years, with no increase in staff during the same period. This has caused commensurate increases in the turnaround time for OS/OW permits, even with extended services hours (i.e,. 12 hours per weekday and 8 hours on Saturday), although the permit turnaround time has improved recently due to the implementation of a number of process improvements. The MCO Section in MCD has experienced hold times ranging from between two and five minutes for permit help desk, specialty permits, district-generated cash permits queues, and up to an hour for the initial general permit queue.
- Although they have declined in recent years, MVD has insufficient staffing levels and operating expenses for the volume of annual and seasonal contacts it receives. Caller hold times are high during peak license renewal periods, and there are a high number of dropped calls.

- MTP workload has been increasing; however, it is estimated that less than 10% of eligible recipients are accessing transportation services. Outreach efforts, which are likely to be required under the Frew settlement, could significantly increase program/call center workload in a very short period of time.
- VTR's staffing levels have declined which has had a negative impact on the dropped call rates, wait times, and customer satisfaction rates and on the division's ability to address staff absences due to illness or training.

Likewise, all call centers' staffing and operational budgets have experienced declines in nominal terms or have been flat or increasing at levels that represent a reduction of resources in real terms.

5. There is no consistent agency-wide performance management and measurement process

Each call center operation varies in its ability to obtain regular and accurate information on key aspects of operational and strategic performance, thereby limiting their ability to manage to performance measures and provide accountability back to agency leadership, customers, and the public. Each program area utilizes an array of performance measures that are defined differently and used to varying degrees in management decisions. Since the agency does not have a common operational platform, individual programs may or may not have access to necessary operational and data management features to identify and diagnose problems, allocate/reallocate human and technological resources, and make good business decisions. Additionally, the information that is available is not aggregated and presented across operations.

The following are common industry indicators that might be used for external reporting and internal management purposes, along with some industry performance standards gleaned from best practices reviews and follow-ups, where available. Please note that performance standards do vary by type of call (inbound versus outbound), transaction, and other variables, including:

- Call wait times (ideally, the first call would be answered in ten seconds or less; some operations set the standard as 80% of calls answered within 15-60 seconds and 99% within 300 seconds; others set the Average Speed of Answer—ASA—at 45 seconds as a monthly aggregate average).
- Dropped call or busy call rates (2-3%, in no case more than 5%).
- Customer satisfaction/complaint rates (based primarily on customer expectations and organization policy, but satisfaction rates should generally be no lower than 90%, or 4.5 out of a 5-point scale; complaint rates should not exceed 5%).
- Other managerial metrics such as:
  - Call/transaction volume per FTE (this varies too widely to indicate a standard).

- Queue/on-hold waiting time (less than 60 seconds).
- Back logged calls (0%).
- First call/contact resolution (85% average, one agent, no transfers).
- Idle times between calls (no standard specified although 2-5 minutes for auto wrap-up is common).
- Average talk time (ATT) (this varies too widely to indicate a standard).
- System availability (99.9%).
- Cycle times (based on customer expectations).
- Call avoidance (based on customer expectations).
- Team leader monitored calls (5-10 calls per month for each front-line employee).

The TxDOT call center operations that maintain formal records do not seem to generate a significant number of customer complaints and those that are generated seem to be resolved informally. However, there are not consistent definitions of and procedures for handling complaints, analyzing trends within and across programs for use in business process improvements, and aggregating division-level complaint information at the department level to ensure proper oversight and public accountability. Some programs do not keep track of or produce formal reports on complaints. Coupled with the lack of formalized customer feedback processes (please refer to V.F.6 below) and the lack of and/or disparate use of performance information, the agency does not have an effective mechanism to identify developing issues/problems before they become critical. The agency is currently undergoing a rulemaking review to update its complaint process; this policy-making process should provide an opportunity to address some of these gaps.

6. Most of the divisions which manage call centers do not have regular/formal structured customer feedback processes

The TxDOT divisions and/or program areas that manage call centers do not have regular/formal communications with (i.e. to and from) customers. Customer survey data is often outdated or sporadically obtained. VTR in conjunction with the University of Texas at Austin has conducted a Customer Satisfaction survey at their regional offices and a link is provided on the TxDOT web site for ongoing feedback. Only the VTR Division maintains an ongoing formal relationship with a customer/user advisory group. As a result, the agency is forgoing an opportunity/mechanism to proactively identify and address critical program and performance issues before they evolve into problems. The agency has recently rolled out, or is planning to roll out, some new operational procedures that could generate some stakeholder resistance and

complaints. Many of these issues could have been communicated, addressed, and perhaps resolved through a user advisory committee process.

In addition, as noted in the Audit Plan and Risk Analysis which was submitted in December 2006 for the Consumer Services Auditable Unit, there are unclear and inconsistent communications between some programs and their customers. There is the potential for non-compliance by a motor vehicle dealer or distributor through a misinterpretation or misunderstanding of a regulation or procedures. This non-compliance could also have an adverse impact on one or more consumers who are customers of that dealer or distributor.[5] Furthermore, an August 2006 TxDOT employee survey conducted by Thompson Marketing for the TxDOT Strategic Communication Plan reflected in a key finding that 'TxDOT is not consistent in the way it shares information.'

7. The access to core agency resource information, such as phone numbers, general program information, agency web site information, etc. varies considerably

Customer accessibility to functional agency resources, such as phone numbers, basic information, and agency web site information varies considerably. For example, many agency web sites often contain only very basic information and use terminology that may be unfamiliar to customers. Common headers for hyperlinks, for example, should use vernacular that is familiar to TxDOT clients such as 'Buying or Selling a Vehicle' or 'Changing Vehicle Ownership.' Another example of basic web site information is the TxDOT Web page referencing Road Conditions (http://204.64.21.201/travel/road_conditions2.htm). This page could also contain a hyperlink to the PDF copy of the Texas Official Travel Map to aid out-of-state visitors in their travel planning who may not be familiar with the state road network without referencing a map.

8. There is a multitude of agency phone numbers, and individual customers do not have a one-stop entry point for 'Level 1' services

There is a multitude of agency phone numbers. While established and regular agency customers know how to reach specific agency staff for the program area they need to speak with and access services, many first-time and individual customers do not have a one-stop entry point for 'Level 1' services—broadly defined as responses to customer requests for basic agency information and basic complaint intake (please refer to V.H.2. for a more detailed definition).

To help address this issue, a single agency 1-800 number was recommended in the report: "CONNECTING THE DOTS, TxDOT Strategic Communication Plan" prepared by Thompson Marketing in August 2006 as part of a communication audit of

[5] Audit Plan and Risk Analysis, Consumer Services Auditable Unit, December 2006, Page 23.

the department. This plan also included a key employee communications finding that "too much time is devoted to redirecting callers (i.e., 'Level 1' calls) to other state agencies."

As Exhibit V-5 shows, the estimated percentage of call center contacts that can be classified as Level 1 calls varies from a low of less than 1% in Medical Transportation to a potential high of 30% in Vehicle Titles and Registration. These calls and calls from new, first time customers could be more efficiently served through an IVR system that recognizes ad hoc (i.e. customer provided) and other key words and phrases and that provides a pre-selected menu of options for immediate transfers to pre-recorded information, a Level 1 operator, and/or a program technician for Level 2/3 services.

Exhibit V-5: Estimated Level 1 Call Center Rates, Number of Calls, and Associated FTEs Hypothetically Required to Staff a Level 1 Call Center Operation

Call Center Program	FY 2006 Level 1 Call Rates, Rounded	FY 2006 Level 1 Number of Calls	Number of FTEs to staff a Level 1 Call Center Operation*
Motor Carrier	Up to 5%	14,621	0.75
Motor Vehicle	12%	11,464	0.5
Vehicle Title and Registration	Up to 30%	84,204	4.0
Medical Transportation	<1%	20,000	1.0
Travel	10%	5,238	0.25
Public Information Office	95%	19,950	1.0
Total Estimated Level 1 Calls and Corresponding FTEs		**155,477**	**7.5 FTEs**

* Assumes one FTE per 20,000 calls. PIO has one FTE (reduced from two FTEs) currently answering an estimated 21,000 calls/year. Each division would need to validate the number and nature of their Service Level 1 calls to determine justifiable FTE requirements.

9. TxDOT is making improved efforts to plan for and effectively execute state emergencies through improvements to its HCRS and plans to employ call center staff as back-ups during emergencies to Travel Information Center staff

TxDOT participates in the state's planning and response activities coordinated by the Governor's designated emergency operations agency—the Texas Department of

Public Safety (DPS). DPS manages a State Emergency Operations Center and a network of district disaster centers around the state, and TxDOT participates in that effort by being part of the emergency response teams, principally through the provision of public information via the Highway Condition Reporting System (HCRS), and through the management of road maintenance activities at the district and area levels. HCRS utilizes a database that is populated with current road condition data by district office personnel in maintenance warehouses, though the currency of this data varies from district to district. The HCRS information is provided in 'real time' to the public through three avenues: Web-based access to maps and current conditions narratives; an IVR-based telephone system that responds to callers' questions based on the type of condition, city/county, and roadways; and live operator assistance provided by Travel Information Center (TIC) counselors who are available 24 hours a day prior to, during, and following an emergency. In addition, the state operates a 2-1-1 system to provide callers with information regarding evacuations and emergency sheltering. The HCRS IVR system may form the basis of a future state 511 system which is currently being planned for by TxDOT.

TxDOT has made efforts to plan for and effectively execute state emergencies through improvements to its HCRS and has plans in place to employ call center staff in other program areas as back-ups to Travel Information Center staff during emergencies.

10. There is no agency-wide coordinated plan for call center disaster recovery

TxDOT has no agency-wide coordinated plan, or significant division level plans with the exception of the TICs, for individual call center disaster recovery. Since TICs are located in various locations in the state, if a TIC become unavailable due to an emergency disruption of services, TRV has the capability to redirect calls seamlessly to an alternate TIC location. Though disaster recovery plans are considered a best practice around the country, few call center operations have effective plans in place. TxDOT's lack of contingency plans to mitigate the effects of a major or minor facility malfunction places the agency and its customers at risk of temporary and prolonged service interruptions.

G. Analysis of Service Delivery Alternatives

As part of the analysis of potential recommendations to address the issues identified, the audit team reviewed the existing operational model and four potential alternative service delivery approaches for providing call center functions in TxDOT. Each of these models were discussed at length and validated with the stakeholder team. This section summarizes the audit team's detailed analysis of these models.

The audit team analyzed the following models:

- Status quo model.

- Modified status quo model.
- Virtual consolidation model.
- Full consolidation model.
- Outsourcing/privatization model.

These service delivery alternatives were evaluated against four primary factors:

- Opportunities for cost savings and other economies of scale through consolidation of call center functions currently performed in multiple business units.
- Potential for improving service delivery by better leveraging program experts through having basic or routine inquiries answered by Web-based or interactive voice response (IVR) solutions and/or customer service representatives, with only questions requiring specialized expertise routed to division staff in specific divisions.
- Potential for outsourcing all or some parts of a consolidated call center/customer service function.
- Opportunities for headcount redirection through consolidation, additional automation and/or some outsourcing of the call center functions.

The goal of these models was to assess which of the alternative approaches to enhancing call center functions, individually or in some combination, would be the most beneficial to TxDOT and its customers. Our findings in regards to each of these models are discussed in further detail below.

1. Status quo model

This model evaluated call center operations as they exist today. The key aspects of this model include the following:

- All call centers have Automated Call Distribution (ACD) systems, except for PIO, and centralized physical operations, except for TRV which routes calls from a central 1-800 number in Austin to available Travel Information Center counselors stationed around the state.
- All call centers have different vendors, equipment, software, features, and processes/policies/procedures.
- Some consolidation has occurred in MCD and MTP operations. Call centers have been independently deploying new process and technologies to improve customer service levels and staff productivity, including Internet-based information and transactional services.
- Call/contact volumes and associated workload have been increasing relative to staffing levels and operating budgets.

- This increase in workload and seasonal factors is causing or could potentially cause performance variances.

The advantages and disadvantages of the status quo call center operational model are addressed in the Key Findings section (please refer to Section V.F) of this report.

2. Modified status quo model

This model evaluated call center operations as they exist today, assuming no major operational changes but including some incremental process modifications. The modified status quo model is based upon maintaining current separate, decentralized, and non-outsourced call center operations, with some customer-oriented process improvements. The key aspects of this model include the following:

- The creation of customer/stakeholder advisory groups (such as has been done by VTR with the county tax assessor collectors).
- The use of periodic, or point of sale (or end of call), customer satisfaction surveys and with average (or range-based) performance standards published under the agency's web site in its 'Compact with Texas' section.
- Continued improvements to Web-based services to improve the ease of access to information over the Web, thus reducing the level of general information calls which have to be made to different program areas.
- Creation of a call center planning group to share information/ideas, best/effective practices, training resources, job descriptions, career ladders, etc., and to standardize where appropriate.
- Consideration of these aspects is based on an assumption that current operations are efficient and customer-friendly, thereby requiring minimal disruptions to current operations.

The relative advantages and disadvantages of this operational model are summarized below.

Advantages

The anticipated advantages of the modified status quo model include the following:

- Minimal disruption of current operations.
- Some staff productivity gains and positive staff morale impacts.
- Some potential customer satisfaction and service gains.
- Some efficiency gains and cost savings from shared resources.
- Improved customer communications and input.
- Enhanced identification and diffusion of best, effective, or promising practices.

Disadvantages

Anticipated disadvantages of the status quo model include the following:

- Potential missed opportunities for greater long-term cost savings and staff productivity gains.
- Potential missed opportunities for improved and consistent management oversight of call center operations.
- No guarantee of enhanced identification and diffusion of best, effective, or promising practices.

3. Virtual consolidation model

This model evaluates an operational framework based on maintaining separate, decentralized, and non-outsourced call center operations and existing systems through their useful lives. The key aspects of this model include the following operational changes and design elements:

- Establishing a call center planning group for TxDOT and chartering this group with the responsibility of develoing a formal agency-wide call center strategic plan for centrally designing, procuring, deploying, and maintaining common technology platforms, software, and training for analyzing common complaints/issues/problems; and including possible outsourcing of certain system components and processes. For example, this could include the potential selection of an outsourced technology environment or 'apps on tap' solution as the agency-wide targeted technical environment.
- Long-term migration to common telecommunications platforms, policies, procedures, and job descriptions (where appropriate/allowable) over time to make more efficient use of capital, staff, maintenance, and training resources in the face of growing demand relative to budgets and staffing levels and with some process improvements. The objective in this model would be to standardize the business operations and processes of each independent program area call center to the extent possible and then migrate each call center to a common agency-wide technology platform as upgrades and enhancements to an individual call center's existing technical environment are required.
- Implementing a single agency customer service telephone number with existing 'branded' or local phone numbers available for current clients to provide better access/transparency, manage growing call volume, and support emergency operations. This single agency customer service phone number would then feed the various existing programmatic call centers (unless you called a program call center directly on its existing branded number).
- Establishing an intelligent interactive voice response (IVR) function programmed to provide answers to the most common questions about TxDOT generally and in each program area.

- Establishing the other customer oriented process improvements outlined in the modified status quo model in Section V.G.2 above.

The relative advantages and disadvantages of the virtual consolidation model are summarized below.

Advantages

The anticipated advantages of the virtual consolidation model include:

- Minimal disruption of current operations.
- Greater staff productivity, customer satisfaction, and associated positive staff morale impacts.
- Improved customer transparency, access, satisfaction, and service gains through adoption of an intelligent IVR to address many questions, which then frees program specialists to better address more complex customer questions.
- Greater efficiency gains and cost savings from shared resources.
- Improved customer communications and input.
- Enhanced identification and diffusion of best, effective, or promising practices.
- Long-term system coherence and sustainability.

Disadvantages

Anticipated disadvantages of the virtual consolidation model include:

- Potential missed opportunities for greater long-term cost savings and staff productivity gains that would be derived from a full consolidation of call center operations and staff utilizing uniform policies, practices/procedures, and systems.
- Potential missed opportunities for improved and consistent management oversight of call center operations that would be derived from a fully consolidated call center operation utilizing uniform policies, practices/procedures, and systems under a unified management structure.

4. Full consolidation model

This model evaluates an operational framework based on consolidation/centralization of all, or most, of the existing program area call center operations.

The key aspects of this model include the following:

- Identification of operations and services that could be physically consolidated or centralized in a single location (e.g., the Austin area) due to common customer bases, services, or functional similarities. This consolidation would include

delivery of both general information and program-specific information to the extent possible and practical.

- Items considered in the scope of the consolidation effort would include phone numbers, staff, physical assets, equipment, and management control.

The relative advantages and disadvantages of the full consolidation model are summarized below.

Advantages

The anticipated advantages of the full consolidation model include:

- Potential cost savings through economies of scale that would be derived from a full consolidation of call center operations and staff utilizing uniform policies, practices/procedures, and systems.
- Greater agency oversight and management control that would be derived from a fully consolidated call center operation utilizing uniform policies, practices/procedures, and systems under a unified management structure.
- Greater consistency in application of agency requirements, goals, and customer service standards.
- Improved/faster identification and diffusion of best, effective, or promising practices.
- Improved use of agency staff and equipment resources.

Disadvantages

Anticipated disadvantages of the full consolidation model include:

- Potential loss of redundancy and multiple site back-ups.
- Negative staff morale impacts.
- Significant level of difficulty in training employees to be knowledgeable on all programs throughout TxDOT.
- Lack of industry-specific knowledge of present call center staff.
- Potential disruption of operations.
- Unforeseen transition costs.
- Potentially higher rent or space expenses if centralized into a single physical location requiring use of non-TxDOT facilities or construction of new facilities on state property.

5. Privatization/outsourcing model

This model considers an operational framework that involves privatizing and/or outsourcing call center operations. It would involve the outsourcing of some or all existing call center operations through a contract with one or more private sector vendors, most likely with some consolidation of call center operations as part of the privatization effort in order to achieve necessary economies of scale. The privatization effort might include some or all of the following call center elements:

- Equipment/software.
- Staffing.
- Facilities/operations.

The relative advantages and disadvantages of a privatization approach are summarized below.

Advantages

The anticipated advantages of the privatization model include:

- Potential cost savings from total or partial outsourcing (though any potential cost savings would need to be carefully analyzed and assessed for the impact on customer service levels in terms of timeliness and quality).
- Greater focus on specific performance areas and possible performance improvements through enforceable contract requirements.
- Opportunity for some redirection of FTEs currently assigned to program call centers.

Disadvantages

Anticipated disadvantages of the privatization model include:

- Limited experience on the part of TxDOT in procuring, selecting and transitioning to an outsourced provider.
- Significant level of difficulty in training contractor's employees to be knowledgeable on all programs throughout TxDOT.
- Limited experience in managing an outsourced provider. This a critical gap as there is a need to ensure that TxDOT has strong contract management capabilities to oversee the selected contractor(s) because total outsourcing requires rigorous training of the providers staff initially, ongoing quality control, and strict contract oversight.
- Potential loss of redundancy and multiple site back-ups through consolidation of functions as part of the privatization effort.

- Negative staff morale impacts and severance costs as TxDOT employees' responsibilities are transitioned to the private sector provider.
- Potential disruption of operations, short-term and long-term, during the transition to the privatized operator.
- Unforeseen transition costs and costs associated with contracting (contract set-up, administration, and management/monitoring), changing contractors, and costs associated with paying for contracts using non-TxDOT facilities.

H. Recommendations

This section presents our go-forward recommendations for managing the call center functions within TxDOT. These recommendations were developed based upon a set of evaluation criteria that measured the effectiveness of the recommendation to address issues documented in this study and the impact of the recommendations on TxDOT's mission, scope, function, and its customers and partners.

Evaluation Criteria

- Cost of ownership—relative benefits and financial costs, transition costs, and total resources required, including role and responsibility definition.
- Long-term stability/sustainability.
- Utilization of best practices.
- Level of service provided—impact on customer experience, transparency, and service levels.
- Impact on employees—morale, turnover, workload, and career opportunities.
- Training, skills, knowledge, and abilities of staff.
- Legal and statutory constraints/considerations.
- Impact on the ability to support emergency operations.

Based on our analysis, Dye Management Group, Inc. recommends a partial consolidation of call center operations through adoption of the virtual consolidation model supplemented by other coordination techniques. The primary purposes of this recommended approach is to create processes and plans to migrate to long-term convergence in systems architecture, software, policies, procedures, and practices to:

- Reduce future cost increases by better managing growing workload with existing staff resources by taking advantage of group purchases of equipment, software, and maintenance contracts, coordinating training, obtaining and employing productive tools (such as system processing features and management tools), and deploying a single agency portal 1-800 phone number and other Web-based solutions to shift some Level 1 call volume away from call centers; and

- Improve customer service by communicating with customers and using standard customer performance metrics and established performance standards and satisfaction/complaint information in management analyses and process improvements.

The audit team felt that physical or managerial consolidation and/or outsourcing or privatization of basic call center operations is not indicated at this time. The call center operations, though sharing some basic functions in common, are nonetheless different enough that a consolidation would not likely produce operational savings and would pose significant operational and customer service risks as noted above in sections V.G.4 (Full Consolidation Model) and V.G.5 (Privatization/Outsourcing Model), which outlined these two models. Additionally, there are some disaster recovery benefits associated with maintaining separate physical locations.

The functions performed by the call centers represent core governmental functions and involve regular working relationships with program and management staff that possess extensive technical knowledge. State employees should staff these functions as is discussed in further detail below. The short-term transitional costs and long-term system integrity and customer service risks associated with transferring this responsibility to a private vendor are in argument against outsourcing or privatizing all or significant portions of call center operations. However, a partial or virtual consolidation, along with some selective outsourcing of non-core functions, such as equipment, software purchases and other technology support, would produce many of the benefits of consolidation and privatization without the costs and risks.

The following recommendations should be implemented as soon as possible in order to realize the benefits of the virtual consolidation approach. These recommendations are as follows:

1. Implement consolidated/coordinated planning and procurement

TxDOT should create a call center planning group within the agency, comprising call center division and program-level management, representative supervisory and line staff, and a representative of the Information Services Division (ISD). The call center planning group would be chartered by an agency senior-level executive sponsor. The charter should formally detail the business case for the group, including problem/opportunity statements, goals, scope, stakeholders, timelines, and milestones. Each participating division/program would assume a rotating one-year chairmanship to coordinate the group under the guidance of the executive sponsor and take responsibility for scheduling and conducting regular meetings as well as producing meeting documents and related work products. The group could also utilize ad hoc or standing subcommittees to address particular issues or planning activities.

The responsibilities of the TxDOT call center planning group should include the following:

- Developing an inventory of all existing call center hardware and software systems, investments, and the anticipated useful life of these assets.
- Determining individual and collective call center operational requirements for processing customer requests, forecasting customer demand, and identifying standard management and customer service performance tools/systems in an overall effort to achieve improvements in customer services.
- In consultation with the Department of Information Resources (DIR), the group should conduct an enterprise planning effort to define and select a set of software and tools to meet the requirements of the agency and specific program areas as well as serve as the common agency-wide platform for all or at least most call centers. Once TxDOT has secured DIR approval for the new platform acquisition, the specific program areas would then migrate to this agency-wide platform as technology refreshes are required in individual program areas (versus procuring one-off solutions on a program by program basis as is done today). There may be exceptions based on business unit requirements that require different solutions from the standard footprint, but these deviations should be reviewed with and approved by the call center planning group and TxDOT senior management on a case-by-case basis.
- Developing a written 'TxDOT Call Center Strategic Plan' to document the results of this planning effort and formally scope and schedule equipment and software replacements, upgrades, and new purchases. The strategic plan should consider outsourcing operational components of the systems, including turnkey service providers and technical outsourced systems providers which provide hardware and software systems as one package (i.e. not requiring equipment/software purchases) such as use of Application Service Providers (ASP) or 'apps on tap' or 'Software as a Service' (SaaS) to provide access to state of the art software and/or network applications to minimize up-front costs and reduce internal support requirements. The strategic plan should also include the equipment, software, and processes and protocols, and training requirements needed for Level 1 staff when deploying a single agency customer portal phone number (please refer to Section V.H. 2. below) and the rollout of other common customer service strategies such as web site re-designs, customer/user advisory groups and surveys, performance measures, and other strategies the planning group may choose to implement.
- Facilitating the sharing of best practices and peer states' and industry performance benchmarks. The Austin Contact Center Alliance (ACCA) and the Incoming Call Management Center (ICMC) (of which MCD and VTR are members) represent available resources for the agency The call center planning group should also consider best practices involving virtual consolidation techniques such as telecommuting from home or remote locations as these techniques can also serve as components of an emergency operations strategy.
- Developing common job descriptions, career pathways, and training protocols agency-wide for all staff with common or overlapping responsibilities.

- Developing specific, standard performance metrics for internal management use and for internal and external reporting purposes. These measures should include minimum agency performance standards and benchmarks.

Consolidated and coordinated planning and procurement offers the agency an opportunity to reduce future capital outlays and operating expenses, improve staff productivity and customer service levels, and/or partially absorb future workload increases. Hypothetically, if these improvements result in a modest 5% reduction in avoided procurement/operating expenses against total agency-wide call center operating expenses of $15.7 million, that would equate to an annual savings estimate of approximately $800,000.

The work of the planning group would entail some costs to complete the inventory, analysis, and work products associated with the various plans, some of which would be borne by TxDOT program/division and ISD staff and some of which might require contract assistance for the more technical and related procurement aspects. Based on prior experience working with other agencies, we would estimate the cost of external consulting support to assist TxDOT with implementing elements of this recommendation would be in the range of a one-time cost of $250,000 to $300,000.

2. Design and implement a consolidated and coordinated TxDOT call center number and portal with an intelligent IVR capability

TxDOT should deploy a single agency customer voice portal through the creation of a single 1-800 number utilizing a comprehensive, unified call prompter with an intelligent tree to route calls through an interactive voice response or IVR system once TxDOT finds an acceptable IVR system. The IVR demonstrations to date in support of the TRV Division's Highway Condition Reporting System (HCRS) pilot have not been satisfactory. Changes in 'voices' between standard verbiage and voice recognition from data in the database has been unacceptable.

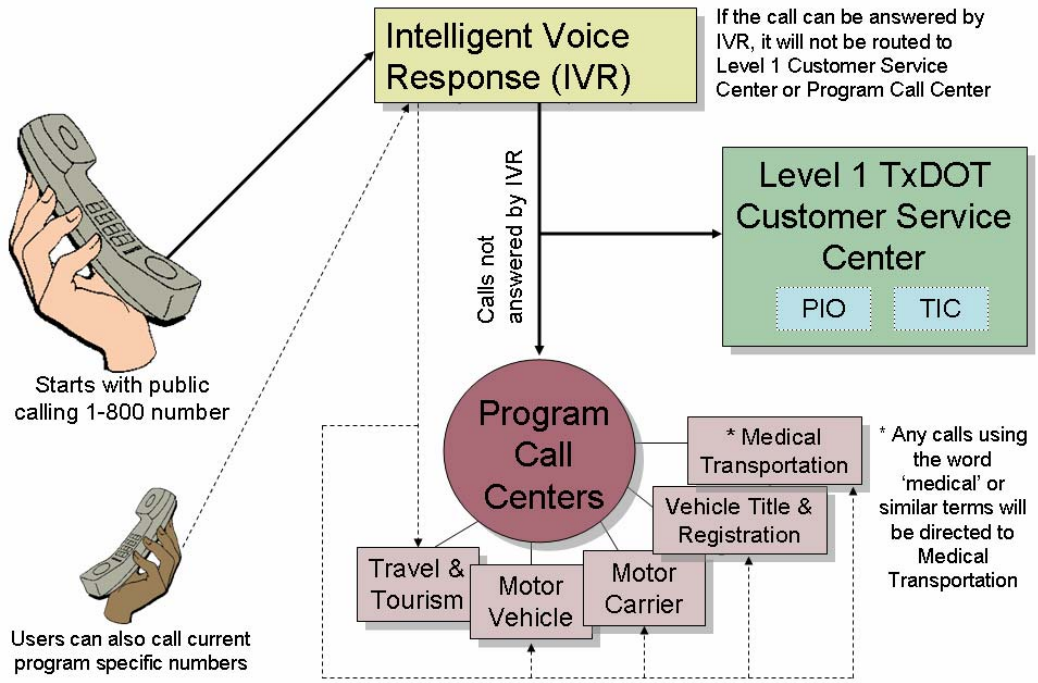
Use of a single agency customer voice portal would improve overall customer access and facilitate resolution of minor and recurring issues and questions without tying up call center technical staff. This would allow call centers to redeploy staff to absorb growing workload increases and improve customer service levels. However, caution should be taken to ensure any information added to the portal is both completely correct in terms of program content and clear in its direction to the customer.

Exhibit V-6 illustrates this proposed customer portal approach. It consists of the following key elements:

- A branded 1-800 number for customers who are unsure how to contact a specific program area and/or which program area within TxDOT to contact.
- An intelligent IVR programmed to respond to voice prompts from callers asking the most common questions in each program area.

- Automatic and immediate routing to the medical transportation call centers of any call determined to be potentially related to medical transportation (to minimize impact on the stringent call answering requirements of the proposed *Frew* settlement).
- Routing of calls to the appropriate program areas in which the caller requires additional assistance and has identified the appropriate program area through their responses.
- Routing of calls to a Level 1 TxDOT customer service function when the program area to which a caller should be routed is unclear based on the caller's voice prompts or questions. The Level 1 operator can respond to the question and/or obtain further information to properly route the call to a specific program area.
- Support for the existing program specific phone numbers would continue to allow individuals who are frequent customers or have the phone number to directly access their desired program area. These program-specific phone numbers can still go through the new IVR (at the option of the program area), with call answers tailored to the program area prior to calls being passed to a program specialist.
- Automated routing of calls to DPS where a caller requests driver licensing or vehicle inspection information.
- Staff training for Level 1 operators/agents to provide the skills and knowledge required to handle Level 1 calls. The staff would also have to have access to current agency and program information.
- Marketing, outreach, and training for customers to encourage effective and efficient use of the system by clearly defining and communicating what the system is, when it should be used, who should use it, and how to use it.
- Customer-friendly features such as one-time customer identification and authentication, limited horizontal options, and easy opt out options.

Exhibit V-6: Proposed TxDOT Single Customer Voice Portal Solution



The basic platform for this system should be through a revamped agency phone system with automated call distribution (ACD) and IVR features, with a published and marketed single number through which all the call centers would be linked. This operation would be managed by the PIO or another suitable entity, with overflow calls directed to TIC staff and possibly other call centers. It would require the expansion of PIO's current staff of one FTE and/or the assignment of TIC staff for this purpose. Our analysis suggests that it is possible that a Level 1 process/system could be absorbed within existing staff levels or utilizing some combination of staffing approaches as discussed below. We recognize, however, that some stakeholders have concerns with the supposition that the new portal can be staffed within existing resources. Based on estimates of current Level 1 call volumes shown in Exhibit V-5 and assuming a staffing ratio of one FTE per 20,000 calls per year, proper staffing of the proposed portal could require a total of up to 7.5 FTEs.

For purposes of this review, the following definition of Level 1 calls was used:

- Answering very basic agency and program questions (e.g., regarding what the agency does, which functions/services it performs/provides, mailing addresses, phone numbers, web site addresses, access to basic literature, etc.)
- Complaint intake (i.e. complaints on the agency and the call centers themselves and not licensee/permitee-related complaints).

- Providing jurisdictional referrals/routings to other programs/divisions within the agency for Level 2 support.
- Providing automatic or operator-assisted referrals to other federal, state, or local agencies (and other entities) for non-jurisdictional questions/issues.
- Any other services that TxDOT call center planning group has determined to properly align with this category of calls.

The estimated staffing for a Level 1 process/system is based on call center-provided estimates of the volume of Level 1 calls using the above definition. However, the proposed call center planning group will need to develop a formal definition of Level 1 calls, more accurately calculate current and projected Level 1 calls (possibly using sampling techniques), and make a determination as to the proper staffing ratios/levels before a precise staffing plan can be finalized. The actual number of these calls might not be fully determined until the agency has developed some historical experience with the system. This could also be heavily influenced by the way the system is marketed to the public.

Assuming that the estimate of 150,000 calls is valid (the estimate of 150,000 calls includes 25,000 calls already handled by PIO and TICs; therefore the net impact are the 125,000 calls now being received by MCD, VTR and MVD), the planning group would have to determine which percentage of those and future overall increased calls would enter the system, because many of those callers would continue to make direct contacts with individual centers using the numbers they already have used. It is very possible that in the initial stages of the rollout, even for the first 2-3 years, call volume into the system would not reach the 150,000 level and would therefore not require the full staffing complement of 7.5 FTEs estimated.

If the current call center staff in PIO and the TICs can absorb the full Level 1 workload at the likely or estimated levels, the agency would not need to redeploy call center staff or otherwise allocate FTEs from other agency functions for this purpose, because by virtue of the virtual call center, all calls would be directed to PIO and TIC staff. However, in making this determination, TxDOT would have to consider other workload demands on TIC staff from walk-in traffic. If the total volume does approach the estimated levels and TIC staff is not able to absorb this workload given their other responsibilities, TxDOT would have to determine which of several options, individually or in some combination, are acceptable for staffing the system. These options include:

- Routing of Level 1 overflow calls to individual call center staff by having the system automatically route the call to the next available customer service agent. All customer service agents in individual program areas would be given training to answer typical Level 1 calls.
- Permanent redeployment of staff in individual program call centers to the Level 1 customer service function, based on an updated analysis of the number of Level 1

calls going to program call centers as a result of the IVR, the Level 1 call center and other recommendations.

- Hiring of additional staff for the Level 1 customer service function.

These options would also have to be weighed against the potential benefits of allowing call centers to 'bank' any savings in terms of reduced call volumes experienced in individual call centers so that they can be used to improve customer service levels and absorb future workload increases. Therefore, depending on actual call volume and the approach the agency decided to take, this recommendation could be FTE-neutral, but changes in staffing levels, assignments, and configurations will be required to some degree.

A Level 1 approach would allow for a call processing system that will, on balance and when used in conjunction with an ACD and IVR, result in a more efficient use of current staff resources. It would also allow the agency to delay the allocation of greater staff resources to the call centers to handle Level 1 calls in the future in order to avoid a drop in customer service levels as service demands continue to increase.

In order to provide for an orderly transition to a single number and avoid service disruptions or excessive phone time for established customers, TxDOT should maintain individual programs' current 'branded' 1-800 and local numbers for recurring customers and ease of local access.

Finally, the non-personnel costs associated with the system depend on actual call volume and the degree of sophistication and number and nature of the features designed into and offered by the IVR system. The two estimates below, which were created based on input from industry stakeholders, are 'fully loaded' costs and include: development, hardware, and software costs amortized over a five year period; licensing costs; and maintenance costs. It also assumes the use of a T1 line (with an additional line as back- up) and six to eight ports.

- Option 1: A very sophisticated system that would allow customers to conduct transactions would cost in the range of $0.13 to $0.15 per minute. Assuming an average call length of two minutes and an annual call volume of 150,000 calls, the total annual cost would range from approximately $39,000 to $45,000.
- Option 2: A simpler system with predetermined menu options and basic voice recognition of key phrases and no substantive transactional capabilities (other than leaving an address to receive literature or other materials) would cost in the range of $0.08 to $0.10 per minute. Assuming an average call length of two minutes and an annual call volume of 150,000 calls, the total annual cost would range from approximately $24,000 to $30,000.

Of course, the actual cost might be a blend of the two options and would have to be adjusted upward or downward, depending on actual average call length and actual call volume.

3. Implement agency-wide and division-specific performance measures, as appropriate, and report on a regular basis

TxDOT should employ a series of operational and communications strategies that serve the dual purposes of improving customer service levels and call center productivity and efficiency. The strategies include:

- Developing, using, and reporting of common customer service standards with minimums and ranges for basic performance measures, such as wait times, dropped call percentages, customer satisfaction/complaint rates, etc. Minimum standards should be established agency-wide by the new call center planning group, with higher performance standards and/or additional standards established by each program area.
- Publishing customer service standards and measurement against these standards in annual reports, in customer documents, and on the agency's web site (i.e. via the 'Compact with Texas' section).

4. Implement customer advisory groups and feedback processes and other customer service improvement strategies for all divisions

TxDOT should establish customer or user advisory groups within each program area to serve as an ongoing formal communications forum on issues of interest and importance to customers and the agency, including changes to processes, rules, and statutes. These customer/user advisory groups can also serve as a sounding board for the Internet-based and customer voice portal improvements recommended herein. Each TxDOT program area should also conduct and use regular customer satisfaction surveys through annual or ongoing (i.e., 'point of sale' or end of call) techniques.

5. Strengthen TxDOT's existing web site and overall Internet presence to improve the customer's ability to easily access key information

TxDOT should continue to strengthen its existing web site to facilitate easier access to information by customers and thus reduce the need for customers to call to obtain information that could have been found on the web site. This should be accomplished by redesigning web sites to make them more user-friendly. This includes incorporating basic program information, developing a frequently asked questions (FAQ) section in each program area, and ensuring that all links on web sites are functional. Some web site examples include:

- Illinois Secretary of State web site - http://www.cyberdriveillinois.com/
- New Jersey DOT web site - http://www.nj.gov/transportation/commuter/
- California DMV web site - http://www.dmv.ca.gov/

TxDOT should also develop enhanced transactional and self-service capabilities where appropriate in program areas. This would allow customers to perform transactions themselves (examples of existing or envisioned programs include oversize/overweight permits, vehicle registration renewals, online dealer titling and registration, online credentialing capabilities, etc.) Customers could also check the status of transactions they are working on with agency staff (as an example a dealer being able to check the status of their dealer licensing application on the Web instead of calling MVD for this information).

The MCD model of customer-directed information assistance and transactional capability demonstrates what is possible with improved Internet-based strategies. MCD's call center operations now process over 70% of its permit transactions via the Internet.

In addition to providing improved customer service and satisfaction, an improved Internet experience, coupled with the other customer service improvement strategies addressed above and the intelligent IVR, offer the opportunity to further reduce call center volume. Even a modest 5% to 10% reduction in call volume would theoretically translate to an estimated 140,000 to 280,000 fewer calls being processed through the various call centers in the long run. This will free up resources to address Level 2 and 3 calls, improve customer service performance, and help to absorb future workload increases.

6. Continue efforts underway to increase the accuracy, timeliness and accessibility of HCRS data to support emergency operations

The Audit Oversight Committee requested the audit team to specifically review the role call centers can play in supporting the state's public response to gubernatorial-declared statewide or regional emergencies such as significant weather events, other natural disasters, or a terrorist attack.

Presently, the state's emergency operations system's wide geographical distribution and existing infrastructure would not appear to need or significantly benefit from a plan to tie in call center staff during an emergency. TxDOT's main contribution to a state emergency response lies in its ability to maintain accessibility to current HCRS information. During recent weather events, the system experienced operational difficulties in supporting a large number of system users. For example, during Hurricane Rita, the system received approximately 260,000 calls, of which approximately 20,000 were answered by a live staff person. TxDOT is working to address these peak demand capacity challenges. In addition, TxDOT, as of the writing of this report, is testing a new IVR system to replace its existing general travel information system. However, at this time, there is no estimated date for completion of the project. The new system will allow callers to obtain information on specific road conditions through automated responses or to speak to a live TIC counselor. The system is available 24 hours a day, and live counselors are available during regular

business hours. During emergencies, specifically assigned TIC counselors throughout the state are available 24 hours a day to answer road condition inquiries. To ensure back-up capacity, TxDOT has made plans to route overflow calls to other TxDOT call center operations in VTR and MCD and to train personnel in those divisions to assist callers.

The audit team recommends that these improvement efforts continue and that the agency work with district offices to ensure current data is consistently and accurately entered and that the agency's information systems can handle peak demands. None of our recommendations impact these plans, including a future state 5-1-1 system (5-1-1 calls could be routed through the recommended Customer Voice Portal). The recommendations involving the move to partial consolidation and the creation of a call center planning group would support the ability of TxDOT to plan for and respond to emergencies. Additionally, the recommended Level 1 processing system could provide another layer of back-up support for this system.

7. Establish disaster recovery plans for each call center – strategy may differ for individual program areas depending on business criticality

As noted in Section V.F.10, TxDOT does not have a formal recovery plan for staffing and equipping individual call centers in the case of disablement (e.g., through power loss, fire, weather, etc.). The cost of maintaining separate redundant facilities is significant, which is a condition experienced throughout the industry. For instance, the remote or mobile worker concept used by MCD enables access away from the office, and could be implemented more widely by other 1-800 applications. Costs associated with necessary infrastructure upgrades (e.g., telecommunications, servers, etc.) to support an increased telecommuting workforce must be included in the total cost for the solution. However, there are cost-conscious options, short of maintaining separate facilities, for planning for such contingencies.

At a minimum, TxDOT should make provisions for the short-term re-routing of calls to agents/operators at home or other remote locations, perhaps in other call centers or district office facilities with available space capacity or in a centralized 'hot' back-up call center jointly funded by TxDOT and other state agencies in the Austin area. An impact assessment of call center services should be performed to determine which services are more critical than others. The use of computer telephony integration (CTI) would assist in this strategy by providing agents/operators with electronic access to customer files and other information resources. For call centers that have leases with private property management companies, disaster recovery provisions should be included in lease agreements.

Accordingly the audit team recommends that all divisions with call center operations, working through the Call Center Planning Group, collectively develop an agency 'Call Center Disaster Recovery Plan' that involves the following components:

- Development of lease agreement provisions for those call center facilities currently residing in private lease space as well as MOUs for facilities co-located in district offices to address casualties and other interruptions.
- Protocols to route calls through existing phone numbers and the recommended agency 1-800 portal to non-affected call centers to take advantage of the geographical redundancy that the agency has as a result of its separate call center operations. The 1-800 number can be redirected to a different location if the main office location cannot be used or if employees must work from an alternate location. If an alternate location is identified in advance, the division or district office can agree to the provision through a departmental Memorandum of Understanding (MOU).
- Arrangements for call center staff to receive and respond to calls at home or other remote locations.
- Review of options to jointly create and manage a 'hot' back-up call center facility in the Austin area involving TxDOT and other state, federal, and local agencies. The cost of a second service center that can take over call center workload if the primary location is unavailable is probably more expensive than the remote or mobile worker alternative that is distance-insensitive.
- The recovery procedures for each call center should be documented and tested. Procedures should indicate how excessive call volumes are to be handled, such as during hurricane emergencies.

In conclusion, the recommendations for the call center planning group and the development of the call center strategic plan and related activities should be implemented within the next year, with full plan implementation to begin in the following year. The single agency customer voice portal should be part of the call center strategic plan developed in the first year and rolled out in the following year. The common customer service improvement strategies recommendations can be scoped out as part of the call center strategic plan in the first year and some of the components can be implemented within 12 months, while others will require additional time before they can be implemented in the following year. Finally, the emergency operations recommendation is an ongoing part of TxDOT's efforts to improve the HCRS system and related activities. The call center disaster recovery recommendations require immediate attention and should be developed and implemented as soon as is practicable within the next 12 months. The recommended timelines for implementing these recommendations are shown in Exhibit V-7 below.

Exhibit V-7: Call Center Consolidation Recommendations Timeline Chart

Recommendation	Within 12 months	Within 24 months
Call Center Planning Group	Immediately charter and constitute the Planning Group, begin meetings, and complete the initial inventory, program requirements analysis, and the TxDOT Call Center Strategic Plan within the first six months. Begin rollout of the plan between 6-12 months. Also, within the first six months, complete identification of best practices to be included in the Plan, development of common job descriptions, career pathways, and training protocols, and development of performance measures and standards	Complete the plan for a common architecture within the first 12- 24 months; begin deployment as appropriate for each business unit allowing for time to fully replace systems as they reach their useful lives
Single Agency Customer Portal	Begin scoping of the portal as part of the TxDOT Call Center Strategic Plan during the first 12 months	Deploy the portal between 12-24 months
Common Customer Service Improvement Strategies	Develop, use, and report common customer service standards with minimums and ranges for basic performance measures, such as wait times, dropped calls percentages, customer satisfaction/complaint rates, etc. Publish customer service standards in annual reports, in customer documents, and on the agency's web site (i.e., via 'Compact with Texas' section) Constitute customer/user advisory groups within each program area to serve as an ongoing formal forum for communications on issues of interest and importance to customers and the agency	Conduct and use regular customer satisfaction surveys through annual or ongoing (i.e., point of sale) techniques Improve Internet-based customer assistance Redesign web sites to make them more user-friendly Provide enhanced transactional or Web-based self-service capabilities, where feasible

Recommendation	Within 12 months	Within 24 months
Emergency Operations and Call Center Disaster Recovery	Develop agency emergency operations improvement efforts, especially HCRS and related activities, which are already underway Commence development of MOUs with district offices and lease companies immediately and consider them part of lease negotiations as lease terms end Complete the development of a Call Center Disaster Recovery Plan and related protocols and procedures as soon as is practicable, given the exposure to service interruptions	Deploy emergency operations improvement efforts on an ongoing basis Review the MOUs, lease agreements, and Disaster Recovery Plan periodically (annually or at least every 24 months)

I. Special Considerations in Regards to the Applicability of Recommendations to the Medical Transportation Program

As noted before, MTP is a unique case within TxDOT due to the special populations served under federal government and court direction. As a result of legislation (SB10) that passed during the 80th Legislative Session, the MTP functions will be transferred back to HHSC not later than September 1, 2008. Therefore HSSC management may choose to review these findings and determine if they will participate in some of the above recommendations that may be appropriate to MTP, subject to the specific requirements under federal law and regulations and court orders/consent decrees/agreements. These standards are noted in Exhibit V-8 below. However, the new performance standards in the recent Frew settlement do allow the state some flexibility in routing calls. As a practical matter, even if MTP had remained in TxDOT, there would likely have been very few MTP-related calls received through the single agency 1-800 portal because customers typically work through an established case-managed system and call the MTP call centers directly to schedule appointments. Study Area 7 (please refer to Chapter VIII of this report) includes a more detailed review of MTP call center operations and related issues.

Exhibit V-8: Frew Settlement Call Center Standards*

Call Center Program	Current Standard	New Standard
Maximum average amount of time for a live operator to answer a call after IVR message and conclusion of menu selections	90 seconds	60 seconds
Maximum wait time from the time a call is initiated to the time a live operator answers the call, including IVR time	N/A	300 seconds
Maximum monthly abandonment rate	10% of calls	10% of calls
Maximum rate of blocked calls (i.e., busy signals, disconnections, and other technical problems)	N/A	2% of calls
All calls answered by a live person	MTP received permission in June 2005 to use one level of IVR messages	New standards allow for IVR menus as long as they conform to the new standards

*Note: New standards are required to be phased in within nine months from the settlement date of the Frew litigation.

J. Summary of Anticipated Cost/Benefits of Proposed Recommendations

The costs associated with most recommendations are difficult to assess because the method of implementation chosen by TxDOT will govern those costs. However, the audit team believes that many of them can be largely absorbed using existing resources and through cost savings related to the recommendations. The audit team, however, also acknowledges the staff and operating budget limitations that the various programs currently face.

Depending on the method of implementing the Level 1 call processing recommendation (please refer to Section V.H.2), staffing costs could become net neutral contingent upon how extensively the 1-800 number is marketed. Other costs will also be influenced by the actual call volumes, the capability of the selected IVR system to address callers' questions, and which staffing approach options TxDOT chose to employ.

Implementation expenses and toll charges associated with a new 1-800 number range from $24,000 to $45,000. Development and implementation expenses associated with establishing disaster recovery facilities must also be included in overall expenses. While the total costs associated with these recommendations are not known, the audit team believes

they can be justified given the improvements in customer service levels, emergency/disaster preparedness and the likely cost savings identified therein.

In addition to providing improved customer service and client satisfaction, the implementation of an intelligent IVR and other service improvement strategies offers the opportunity to further reduce call center volume and expense. As mentioned previously, each division will need to validate the number and nature of their Level 1 type calls to determine their FTE requirements. Hypothetically, a modest 5% to 10% reduction in call volume could translate to 140,000—280,000 fewer calls being processed through the various call centers. This reduction in call volume should free up resources to address the Level 2 and Level 3 calls, improve customer service performance within each program call center, and help to absorb future workload increases.

Taken as a whole, the recommended strategies will provide a basis for long-term cost savings and/or cost avoidance, system and operational sustainability and rationality, consistency in management focus and oversight, and improvements in customer service levels in the face of growing workload levels and complexity, especially if implemented in conjunction with other process improvements identified in this chapter.

VI. Study Area #5: Additional Revenue Opportunities and Potential Alternatives for Organizational Re-alignment within the Travel and Tourism Functions

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Various elements of travel and tourism programs within the State of Texas are currently operated by five different state agencies under the general coordination of the Office of the Governor, Economic Development and Tourism (EDT). Within TxDOT, travel and tourism programs are managed by three different divisions, with the Travel Information Centers (TICs), travel publications and Highway Condition Reporting System (HCRS) among the program areas managed by TxDOT's Travel Division. The Traffic Operations Division also has responsibility for some programs such as the LOGOS sign program and the new 511 Travel Information System. Likewise, the Maintenance Division has responsibility for the Safety Rest Areas (SRAs).

During the initial risk assessment process, the audit team identified and documented risks related to various aspects of the TxDOT travel and tourism programs. Two risks were selected for further study. These risks were:

- Alignment of Travel Division functions with TxDOT's overall strategic objectives.
- Opportunities for revenue generation at travel information centers and safety rest areas.

This study area involved a detailed assessment of the department's travel publications and the operations of TICs and SRAs to determine how these program areas contribute to the strategic objectives of TxDOT. Our assessment included what potential strategies might be applied to assure that Fund 6 priorities are being advanced and to determine if revenue potentials are being maximized. The detailed assessment identified a number of issues relating to providing tourism and travel information services within TxDOT. Strategies to address each issue were evaluated to strengthen existing operations and assure that the objectives of both TxDOT and the state are being effectively advanced.

A. Summary of Findings and Recommendations

The Dye Management Group, Inc. audit team conducted an in-depth review of the Travel Division's Travel Publications and Travel Services Sections. In addition, the review included the Facilities Section's Safety Rest Area program in the Maintenance Division.

A stakeholder group consisting of TxDOT staff from the Travel and Maintenance Divisions, a representative of the Office of the Governor EDT, and external stakeholders from the travel industry was convened to provide guidance and input to the audit team and to review audit findings. Interviews were conducted with management, staff, and external

stakeholders to obtain an understanding of the facts and issues facing these stakeholders. These key findings are presented in detail in the following pages but are generally summarized as follows:

- The travel and tourism programs within TxDOT generally appear to be efficiently and effectively managed based on:
  - TIC and SRA management being innovative and attentive to the needs of motorists resulting in high public satisfaction with both the TIC counselors and the renovated SRAs.
  - TxDOT's net investment of approximately $7.6 million dollars in its travel publications and travel information center programs provides estimated revenue of $24 million plus in terms of fuel tax to Fund 6. This figure does not include additional sales tax or other revenue for the state, cities, or counties which may be generated as a result of visitors spending additional days in the state because of information provided by these programs. Likewise, it does not include other tangible or intangible benefits such as accident avoidance as a result of tired drivers stopping at safety rest areas.
  - TxDOT has generally been very proactive and innovative in terms of enhancing services to citizens, identifying new revenue opportunities, and/or identifying opportunities to improve the cost-effectiveness of program delivery through targeted outsourcing of non-core business functions.
  - The emphasis placed on attractions and events in smaller towns by TxDOT's tourism program has expanded tourism opportunities for smaller Texas communities, thus increasing total miles traveled by visitors within the state, promoting economic development in rural areas and helping to extend the length of visits.
- This success story in regards to TxDOT's travel and tourism programs, however, is not as well known to policy-makers and other stakeholders as it could be. A stronger communications strategy is needed to inform a wide range of policy makers and other stakeholders about these customer satisfaction and revenue generation outcomes.
- Clear synergies exist between the tourism programs and the strategic goals of TxDOT through extending the length of stays and helping to create positive visitor experiences. The study team believes that there is a strong fit between the travel and tourism programs managed by TxDOT and the department's organizational mission. The department's tourism programs, at a minimum, play a role in meeting TxDOT's strategic objectives to reduce congestion, enhance safety, and expand economic opportunity.
- The interagency MOU coordinating the delivery of state tourism programs does a good job in achieving separation of functions and agency focus while coordinating tourism efforts statewide. At the same time, there is no clear alternative location at this time for TxDOT's tourism related functions within Texas state government.

- A number of existing TxDOT travel and tourism programs generate revenue. For example, *The Texas Accommodations Guide* is self-sustaining, while *Texas Highways* magazine and *The Texas Events Calendar* are almost self-sustaining.
- There are, however, additional revenue opportunities which TxDOT should continue to pursue including:
  - Updating the administrative code provisions regarding appropriate advertising in travel publications to allow for the potential for new types of advertising to be used in department publications.
  - Continued evaluation of revenue generation opportunities that may be appropriate at the 27 safety rest areas not located on the interstate highways.
  - Sale of banner ads on the TexTreks web site that is available via wireless Internet access at TICs and SRAs.
- The new federal Interstate Oasis Program presents limited revenue opportunities for TxDOT, with the primary revenue potential likely to be fees for signing establishments as an oasis. It is not viewed that TxDOT itself would be an operator of oases.
- TxDOT is currently limited by statute in its ability to provide travel centers and other traveler services as part of the design of the proposed new toll roads being developed throughout the state. This represents both a potential customer service issue and a lost revenue opportunity for TxDOT that could help to fund the department's travel and tourism programs.
- Outsourcing the management of rack space in TICs, and possibly expanding rack space to some SRAs, could reduce the burden on travel counselors at the TICs, while simultaneously providing for wider distribution of travel information through safety rest areas; however, it would not likely constitute a revenue opportunity for TxDOT.
- There are some opportunities for greater synergy and efficiencies between the Travel Division and Maintenance Division. This includes:
  - Having the advertising sales firm already under contract to TxDOT sell the banner advertising on TexTreks would leverage the firm's experience with the travel industry and allow advertising on TexTreks to be sold as part of a package of advertising offerings agency-wide. The Maintenance Division could then focus on contracting with a provider who would be responsible for one distinct function: maintenance of the wireless Internet infrastructure at TICs and SRAs across the state.
  - Consolidating the contracting processes for facilities management and maintenance, which are currently contracted for independently by the Maintenance Division for SRAs and the Travel Division for TICs.

The stakeholder group reached a consensus opinion that the findings gathered by the audit team accurately represented the pertinent issues and opportunities related to TxDOT's

travel and tourism programs. Recommendations were then developed by the audit team based upon the findings and analysis. These recommendations are presented in detail in the following pages but are generally summarized as follows:

- The travel and tourism programs should remain housed within TxDOT.
- TxDOT should regularly conduct formal return on investment (ROI) studies for Travel Division publications and services and proactively communicate the results of these studies to stakeholders.
- The department should continue exploration of potential commercial activities at SRAs that are not located on the interstate.
- TxDOT should utilize the Travel Division's existing advertising sales channels to market the sale of banner ads for the TexTreks web site, thus better leveraging other existing advertising sales activities for the department's travel publications. Likewise, TxDOT should also explore opportunities for obtaining passive revenue through the TexTreks web site and/or existing SRA kiosks.
- TxDOT should initiate use of banner advertising and digital subscriptions for *Texas Highways*. Likewise, *Texas Highways* magazine should use its content and photography to market additional products and services through its web site.
- The Travel Division should complete its review of the administrative code restrictions on advertising for TxDOT's travel publications. Likewise, TxDOT should continue to regularly review subscription and advertising rates for Travel Division publications to match market conditions.
- The department should conduct a feasibility study to evaluate the potential for using an outside vendor to manage and replenish brochure racks at the TICs, with a possible expansion to SRAs.
- TxDOT should develop a departmental strategy related to traveler services to be provided on toll road facilities and how revenue resulting from these services could be allocated to potentially support existing travel and tourism programs, thus reducing the investment required from Fund 6 to support these programs. This study should include customer surveys and be conducted with extensive travel industry involvement. TxDOT should then seek statutory changes during the next legislative session as appropriate to allow for implementation of the proposed strategy/plan.
- The Travel Division should consolidate the data collected for the *Accommodations Guide*, *Texas State Travel Guide* and the *Texas Events Calendar* into one or more databases to facilitate access and currency of the information, ease the transfer of the data to the state's web site, and facilitate publication of this information.
- TxDOT should consolidate the contracting process for facilities management and maintenance services for the TICs and SRAs.

The remainder of this chapter describes our analysis of this study area in more detail. It includes an overview of the travel and tourism program areas within the study scope, a review of the risks included in the study area for further analysis, and a discussion of the

audit analysis approach for this study area. It also includes a review of best management practices, a summary of program activities by other peer states, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

Various elements of travel and tourism programs within the State of Texas are currently operated by five different state agencies under the general coordination of the Office of the Governor, Economic Development and Tourism (EDT). Within TxDOT, travel and tourism programs are managed by three different divisions. Most travel program such as the Travel Information Centers (TICs), the various travel publications and the Highway Condition Reporting System (HCRS) are managed by TxDOT's Travel Division. The Traffic Operations Division has responsibility for some programs such as the LOGOS sign program and the new 511 Travel Information System. Likewise, the Maintenance Division has responsibility for the Safety Rest Areas (SRAs).

This section provides a brief history of the organizational responsibility for travel and tourism programs in Texas and an overview of the current division of responsibility between the various agencies for the travel and tourism programs. It then presents a brief overview of the specific TxDOT travel and tourism programs within the scope of this audit.

1. Overview of statewide tourism program

The Texas tourism program traditionally has been operated by a diverse and complex mix of various state agencies conducting programs that often overlapped and were considered inefficient by numerous state study groups that reviewed their operations. Until 2003, the Texas Department of Economic Development had a lead role, but other key participants, including TxDOT were conducting programs that were not properly coordinated, according to a report of the Sunset Commission in 1999.

In its 2003 Sunset review process, the Department of Economic Development was abolished and coordination of the state's tourism functions was moved to the Office of the Governor. Economic Development and Tourism (EDT) within the Office of the Governor was charged with taking the lead to coordinate the activities of the five major providers of tourism services and developers of tourism-related materials by entering into a Memorandum of Understanding (MOU) that would establish a plan of action for each agency and require an annual strategic plan to establish goals, objectives and performance measures, including development of a return on investment (ROI) analysis. Today, this analysis is still done by EDT, and it reflects the ROI from the marketing activities of the five MOU agencies. However, it but does not include all the activities that reside solely within the Travel Division at TxDOT.

The *Strategic Tourism Plan Fiscal Year 2007* presents a summary of the tourism marketing plan that the EDT, the Texas Commission on the Arts (TCA), Texas Parks and Wildlife (TPWD), Texas Historical Commission (THC) and TxDOT have agreed

upon for the year. The strategic plan reflects the ongoing process to coordinate activities between the five major agencies involved in promoting tourism in Texas. The plan and the MOU reflect a delineation of functions that target efforts in each agency to address specific needs or tap certain strengths that limit duplication of effort and maximize the use of available state funds.

While the current arrangement is similar to the situation that existed in the past, it appears to be more streamlined and focused than the former arrangement. Clear lines of responsibility have been established, and the operations of the five main agencies are coordinated to compliment each other. The unique feature of Texas' approach to tourism funding is that it taps a variety of funding sources that are direct beneficiaries of a successful tourism program.

The reported statewide return on investment (i.e., state tax revenue per state dollar invested in FY2006) for all tourism-related expenditures amounted to $25.24. The FY2007 tourism-marketing budget, as outlined in the strategic plan, indicates the primary funding sources and anticipated net costs for each entity included in the state tourism MOU. Exhibit VI-1 provides a summary of the FY 2007 Texas tourism-marketing budget.

Exhibit VI-1: Summary of FY 2007 Texas Tourism Marketing Budget

Entity	Functions	Funding Sources	Net Cost (estimated)
EDT	Promotion of the state's travel products and destinations through consumer advertising	Fund 5003 (state hotel occupancy tax)	$18.3 million
TxDOT	Promotion of in-state travel by publishing a variety of travel-related publications	Fund 6 (state highways)	$1.6 million
TPWD	Promotion of state parks, state historic sites and nature, cultural and heritage sites, and outdoor recreational activities	Account 9 (game, fish and water safety), Account 64 (state parks), sponsorships, grants, donations and revenue-generating dollars.	$576,416
THC	Promotion of historic sites and heritage attractions	EDT, TxDOT, and TEA-21	$483,892 *
TCA	Promotion of cultural tourism and activities	TxDOT, appropriated receipts and general revenue	$188,500 *
		Total	$ 20.2 million

* NOTE: Additional funds spent on program/product development are detailed in each entity's individual plans.

The funding from Fund 6 to support a portion of the costs of THC and TCA tourism activities is included in the Travel Division's annual budget but is not reflected in the TxDOT dollars listed in the exhibit above.

Within Texas, a number of stakeholders participate in providing travel and tourism services to visitors of the state, as well as state residents traveling within Texas. Travel services (the infrastructure that provide travelers with information regarding destinations and attractions) are also divided among a number of key participants. Within government, the TxDOT Travel Information Centers, the WiFi Internet access, and the travel portal developed for the safety rest areas and centers are just the highways-based portion of the system. Travel industry associations and local convention and visitor's bureaus also contribute in providing informational resources relating to accommodations, food, and attractions. Exhibit VI-2 provides a breakout of the state's tourism regions.

Exhibit VI-2: Texas Tourism Regions

Tourism regions used by TxDOT and other tourism agencies to address regional and localized travel opportunities
Big Bend Country
Gulf Coast
Hill Country
Panhandle Plains
Piney Woods
Prairies & Lakes
South Texas Plains

The TxDOT travel services and the *TexTreks* Web portal are geared to provide statewide information and rely on the local visitor bureaus and other information systems to address regional and localized tourism opportunities. This regional approach to tourism information was adopted over 15 years ago based on an agreement reached between governmental agencies and the Texas travel industry, and it is now the standard applied to most tourism publications. This approach facilitates visitors being able to locate attractions and events in specific areas of interest. To this end, state literature and the Web portal allow motorists to target destination options based on their region of interest.

2. TxDOT travel programs included in the study area

Two of the primary focuses of this study area are the 12 Travel Information Centers (TICs) operated by TxDOT's Travel Division and the 86 Safety Rest Areas (SRAs) across the state operated by the Maintenance Division which provide some similar services to the TICs. The third area of focus is the various publications related to tourism that provide information for resident and non-resident visitors to the state, which are produced by the Travel Division. Brief descriptions of each of these program areas are provided below.

a. Travel Information Centers

TxDOT's Travel Division oversees the operation of 12 state travel information centers, which are identified in Exhibit VI-3. All but two of the centers are located along major highways. The Austin Capital Visitor Center and the Langtry locations are the exceptions.

Exhibit VI-3: State Travel Information Centers

Amarillo	I-40
Anthony	I-10 near El Paso
Austin	Capitol Visitor Center
Denison	US 69/75
Gainesville	I-35
Langtry	U.S. 90 W. State Loop 25
Laredo	I-35 N. at US 83
Orange	I-10
Texarkana	I-30
Valley	US 77 / 83 Harlingen
Waskom	I-20
Wichita Falls	900 Central Freeway

The centers are staffed by 62 full and part-time travel counselors assigned to the Travel Services Section of the Travel Division. The centers are open 360 days a year, closing only on Easter, Thanksgiving, Christmas Eve, Christmas, and New Year's Day. They are open nine hours a day from 8 a.m. to 5 p.m., except during the summer months when they open ten hours a day from 8 a.m. to 6 p.m. starting the Friday before Memorial Day and ending on Labor Day. All but the Austin, Langtry, Valley, and Wichita Falls centers are open 24 hours a day to provide motorists with restrooms, automated road condition information, emergency services, free wireless Internet access, and covered picnic tables. These facilities are fully accessible for people with disabilities and provide security surveillance.

During daytime hours when the TICs are staffed, travelers can obtain a number of services from the counselors on duty at the center. These services include:

- Handouts of TxDOT travel literature and other additional travel literature, including maps, pamphlets, booklets, and brochures from local and statewide destinations, points of interest, special events, lodging, and restaurants.
- Travel information, professional trip-planning assistance, and road condition information.
- Information on scenic wildflower routes in the spring and on foliage colors in the fall.
- Regionalized displays and a video theater for viewing Texas attractions and destinations.
- Motor carrier permits for oversized/overweight loads, temporary licenses and TxTags for use on state toll roads.

With the exception of the Capitol TIC, each center has brochure racks and ten TICs have display cases that are made available to Texas-based attractions and businesses. There is no display case at the Capitol or at the TIC in Wichita Falls. No fee is required to have materials placed in either the racks or the displays maintained at each center, but content review and approval must be secured. Approved materials are sent to each center and the travel counselors on site maintain an inventory and stock the brochure racks to assure the display cases are kept current. With the exception of the Capitol, Langtry, and Wichita Falls TIC, each center also has a vending machine area that is operated by the Division for Blind Services of the Texas Department of Assistive and Rehabilitative Services in accordance with federal and state law.

All costs related to staffing and operating the travel information centers are contained in the budget for the Travel Services Section within the Travel Division. That budget had been almost $6.5 million in FY 2006, but for fiscal years 2007 through 2009, the projected budget is a little over $6 million. Over the past 15 years, based on a separate capital improvement budgetary initiative, all of the centers have been fully renovated. Grounds maintenance and janitorial services, which account for about one third of the budget, are outsourced to local contractors. Center operations can include coordination with either the local maintenance office or the TxDOT district office to solve unique or special needs.

Based on traffic counts which have been conducted, the 12 TICs service approximately 7 million visitors annually, accounting for over 1,600 daily visitors per TIC. The TICs also maintain separate customer service records and report that 3.6 million of those visitors had contact with a travel service coordinator, which results in an average daily volume of around 824 contacts with customer service representatives per facility.

b. Safety rest areas

Safety rest areas (SRAs) are managed by the Facilities Section in TxDOT's Maintenance Division. The function of the safety rest areas is to provide a safe rest stop area for drivers along their designated route. Because SRAs only have contracted janitorial or grounds maintenance personnel on site, they do not distribute travel literature or provide personalized services like the TICs. They are open 24 hours a day, all year long, and provide motorists with restrooms, free wireless and kiosk-based Internet access, covered picnic tables, accessibility for people with disabilities, and parking.

Similar to the renovation program for the travel information centers, an ongoing program started in 1999 using federal enhancement funds to renovate all of the state's 86 safety rest areas. To date, approximately 30 have been renovated. Each renovation seeks to achieve a unique design to complement the locality that usually includes an air-conditioned lobby area with some display area but no brochure racks for distribution of tourist related materials. Maps and tourist-related information is provided through an Internet portal site called TexTreks (http://www.textreks.net/) accessible through the free wireless Internet or kiosk systems installed at each rest area. This same system is available at the travel information centers. The installed wireless system and the Web portal site were developed by a vendor agreement that has now been cancelled. Currently, a request for proposals to secure a new business partner to provide maintenance for the equipment and software services related to the installed system is under development, with a goal of offsetting the cost of this support by the selected business partner selling banner advertising on TexTreks.

On average, 48 million motorists are reported to have stopped at the 86 SRAs in the last full fiscal year. This is based on car counts where available and then estimates based on these car counts across the remaining SRAs. This volume suggests an average of over 1,400 daily stops per SRA, which represents a large number of travelers that have access to the road condition and tourist-related information provided by the wireless and kiosk Web portal as well as restroom, picnic, and other SRA facilities.

c. Travel Division publications

In addition to operating travel information centers, the TxDOT Travel Division also develops key components of Texas' overall tourism marketing program. In coordination with the Office of the Governor, Economic Development and Tourism (EDT), the Travel Division's Publications Section provides editorial, production, marketing, and fulfillment services for a number of state mandated publications. The state's official travel magazine, *Texas Highways*, is one of those publications. Available by subscription and on newsstands, the magazine is a monthly magazine devoted to promoting travel within the state. An annual budget of approximately $5 million supports the magazine's production and distribution. Almost all of this cost is returned through subscription revenue, ancillary product sales, and advertising revenue. Monthly production runs are slightly over 250,000 copies. Articles and

content developed for the magazine can also be found online at http://www.texashighways.com/.

In support of the Texas tourism program, the Publications Section also produces the state travel packet. The basic components of the packet include the *Texas Official Travel Map*, the *Texas State Travel Guide*, and the *Texas Accommodations Guide*. The packet is mailed when requests for Texas travel information are received either by phone or by requests received through the official Texas travel web site at http://www.traveltex.com/ maintained by EDT in the Office of the Governor. These three items are also available individually as handouts at the travel information centers as well as at local convention and visitor bureaus.

In addition to the basic travel packet, the Publications Section also maintains and publishes the *Texas Events Calendar*. Publication is on a quarterly schedule but the information gathered is used to support the official Texas travel web site.

Except for the official state map, all primary publications sell advertising or listings to offset the costs of production. Chapter 204 of the Transportation Code specifies acceptable and unacceptable subjects to assure that the quality and quantity of the primary information content of each publication is not impaired. The budget for production and fulfillment of travel literature ran a little more than $3.5 million in FY2006, with advertising revenues of slightly more than $500,000.

C. Risk Identification and Assessment

Exhibit VI-4 provides a summary of the key risks included in this study area. Each risk is then described in further detail below.

Exhibit VI-4: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Travel Information Centers, Travel Literature and Publications	Alignment of Travel Division functions with TxDOT's overall strategic objectives	High	• Policy-maker questions about synergy with TxDOT's overall strategic objectives • Impact on competing Fund 6 priorities • Potential synergies through re-alignment of some functions with other state agencies or strategic outsourcing of functions

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Travel Information Centers and Safety Rest Areas	Opportunities for revenue generation at travel information centers and safety rest areas	High	• Development of additional revenue sources to partially offset cost of travel and tourism programs • Need to assess participation in and implementation approaches for Interstate Oasis

1. Alignment of Travel Division functions with TxDOT's overall strategic objectives

The TxDOT Travel Division faces the same challenge as many other state tourism-related functions. The home for the services they provide seems partially related to highways considering the distribution of materials done at the Travel Information Centers and their mission to encourage visitors to spend more time in the state, resulting in more miles traveled and consequently more dollars spent on fuel in the state. At the same time, it could also be perceived as a completely separate function with the sole purpose of information dissemination and not falling within the strategic objectives of a state department of transportation. In fact, several legislators in the past have specifically questioned the inclusion of the tourism programs within TxDOT and the alignment of these programs with TxDOT's strategic mission.

This question was also asked at the state level during the Sunset hearings surrounding the Department of Economic Development, which was dismantled and whose leadership role is now assumed by the EDT in the Office of the Governor. While the functions of TxDOT were not affected by the Sunset process for the Department of Economic Development, interestingly enough, one of the alternatives considered during this process was to move most of the state tourism functions to TxDOT.

2. Opportunities for revenue generation at travel information centers and safety rest areas

This audit also examined the question of whether there were additional revenue opportunities at TICs and SRAs. While it might appear that the TICs and SRAs have a captive audience and are ripe for commercial activity, there are a number of federal restrictions regarding what options are available to TxDOT for revenue generation, especially for those facilities located on the interstate system. There are also federal laws that provide for any vending services to be handled exclusively by the Division for Blind Services of the Texas Department of Assistive and Rehabilitative Services, further limiting TxDOT's ability to recoup its costs of operation at these facilities.

Within these constraints, however, this audit attempts to examine revenue opportunities both at the roadside facilities and through other tourist and travel-related services provided by TxDOT's Travel Division.

D. Audit Analysis Approach

To assist in our analysis of the risks related to this study area, the study team established a technical working-group of stakeholders to provide guidance and input to the audit team. Representatives from TxDOT management and staff responsible for the various programs in the study area as well as external stakeholders representing associations related to the study area were identified and invited to participate. The members of the Travel and Tourism stakeholder team included:

- Doris Howdeshell, Director, Travel Division.
- Kathy Murphy, Director, Travel Publications Section.
- Brent Dollar, Travel Literature/Fulfillment Manager.
- Brenda Harper, Director, Travel Services Section.
- Martha Martin, Travel Services Section.
- Tim Fennell, Advertising Manager, Office of the Governor Economic Development and Tourism.
- Paul Serff, President and CEO, Texas Travel Industry Association.
- Bob Phillips, Town of Addison, Director of Visitors Services and a representative of the Texas Association of Convention and Visitor Bureaus.
- Andy Keith, Manager, Safety Rest Area Program in the TxDOT Maintenance Division.
- Michael Leary, Director, Planning and Program Development, FHWA Texas Division.

Our audit analysis approach, which was executed in conjunction with this stakeholder team, consisted of the following work steps:

1. Conducting structured follow-up interviews with each of the above stakeholders to validate the risks and identify opportunities. These interviews helped to identify the organizational relationships, business practices, service performance, and customer relationships related to Texas tourism and travel information.
2. Reviewing existing procedures and practices to identify areas where improvements might be needed.
3. Evaluating management controls both within TxDOT and in relation to the cooperative agreements maintained with external entities.
4. Conducting a survey of national trends and alternative practices in use by other states to address tourism and travel information, and the operations of safety rest areas.

5. Identifying issues that provided opportunities to adjust or refine the current operating structure and address the risks included in this study area, developing alternative approaches to address each issue, and conducting detailed analysis of these alternatives.
6. Reviewing the results of our detailed analysis with the stakeholder working-group to ensure that the audit team's subsequent recommendations were being developed based on a set of facts upon which there was general agreement with the stakeholders.
7. Developing recommendations and documenting them in this report chapter.

Work in this study area involved conducting detailed interviews with a number of TxDOT staff, external stakeholders, and other resources. Exhibit VI-5 summarizes these interviews by role and function.

Exhibit VI-5: TxDOT Interviews and Site Visits Conducted

Name	Role	Function
Kathy Murphy	Director	Travel Publications Section
Brenda Harper	Director	Travel Services Section
Brent Dollar	Travel Literature/Fulfillment Branch	Travel Publications Division
Martha Martin	Special Projects Coordinator	Travel Services Division
Tim Fennell	Office of the Governor	Economic Development and Tourism
Andy Keith	TxDOT Maintenance Division	Facilities Safety Rest Area Program
Clarence Rumancik	Environmental / Transportation Planning Engineer	FHWA - Texas Division
Michael Leary	Director, Planning & Program Development	FHWA – Texas Division
Paul Serff	President	Texas Travel Industry Association
Bob Phillips	Director of Visitor Services	Town of Addison
LuAnn Reinders		Iowa Welcome Centers & Tourism Research

E. Best Practices Survey of Other States

To help identify potential alternatives for addressing the issues with TxDOT's program, the study team conducted a survey of best practices in peer states and assessed the applicability of these best practices to Texas.

This best practices survey was geared at addressing issues identified as part of initial fact-finding with the stakeholder team. This best practice survey was conducted through Internet research and selected follow-up telephone interviews with representatives from other states in order to determine the factors and results they achieved in implementing their programs. Texas has taken a unique and progressive approach in coordinating tourism efforts across multiple agencies using an MOU. This affected the amount of best practice data that was identified in the area of tourism that would be of benefit to TxDOT.

This section summarizes the results of this best practices survey. States included in the targeted interview and research effort included:

- States that produce similar publications to those published by TxDOT.
- States that have utilized alternative revenue generation approaches that are different than those currently being implemented in Texas.

Some of these contacts came from referrals provided by the stakeholders, while others were identified from secondary research conducted as part of this study area or as part of the original risk analysis. A listing of the states contacted or included in the review and the factors discussed are presented below. In addition, a summary of a relevant National Cooperative Highway Research Program (NCHRP) study on integrating tourism programs within the overall mission of transportation agencies has also been included.

1. Pennsylvania

The Pennsylvania Department of Transportation (PennDOT) revised their organization in 1996 to include the counselors and operations of the state welcome centers within the department. This changeover was accomplished by PennDOT during a period when the welcome centers were being upgraded and renovated. The budget for the welcome centers is set at $2.6 million, but this figure does not include facilities upkeep and maintenance as that function is provided by another section within PennDOT. The primary component in the budget is for the staffing needs to staff the 15 travel information centers from 7 a.m. to 7 p.m. each day, seven days a week with only a few holiday exceptions. The centers entertain about 3.6 million annual visitors, a number very close to the scale of TxDOT's operations.

2. Iowa

In response to budget cuts, the Iowa Department of Transportation adopted a rack space fee for literature displays at its four welcome centers. These fees generate approximately $55,000 in gross revenues and have provided sufficient additional funds to hire the necessary part-time counselors to keep the centers open seven days a week. Without this stop-gap measure, the centers would have been forced to close one or two days each week.

The addition of a fee-based system for managing rack space has reduced the number of smaller concerns represented in the display areas and has also localized the materials available in each center. In addition, it has also added some new inventory and billing responsibilities to the welcome center staff, which slightly reduces the amount of staff time available for customer services.

3. Arizona

The Arizona DOT publishes a travel magazine similar to the one produced by the TxDOT Travel Division. *Arizona Highways* was the first travel magazine produced by a state highway organization. It is perhaps the best known of travel-oriented highway magazines in the country, with the Texas version a close second. *Arizona Highways*

has become a self-supporting operation that no longer requires state appropriations, even though the magazine contains no advertisements. *Arizona Highways* accomplished this by marketing related products—books, calendars, cards, maps, and clothing—through bi-annual catalogs, which account for approximately 40% of total revenue. To remain competitive and increase circulation, *Arizona Highways* maintains a delicate balance between satisfying the editorial appetites of its current subscribers, most of who are over the age of 60, while pursuing a new generation of younger readers through more active magazine departments and the Internet. The recent circulation is about 326,000 with an annual subscription rate of $24.00.

4. California

Operation of the display rack management function for California's state welcome centers is outsourced to a professional brochure distributor. This relieves the state of warehousing and managing brochure materials and allows the vendor the opportunity to cover the costs of its operation by charging fees for the brochures and literature it displays. As part of this agreement, custom display racks were specifically developed for California's state welcome centers.

5. Virginia, Florida, Vermont, and Montana

These states have developed programs that charge for display space in their tourist information centers. Each of these programs operates on a regionalized model, which encourages displays that emphasize attractions in the localities closest to each center or the main destinations along the highway.

6. National Cooperative Highway Research Program (NCHRP): Integrating Tourism and Recreational Travel with Transportation Planning and Project Delivery

As part of the best practices research, the Dye Management Group, Inc. team found the following article in a 2004 NCHRP Synthesis report published by the Transportation Research Board titled *Integrating Tourism and Recreational Travel with Transportation Planning and Project Delivery*. This research effort identified that:

- "The relationship between tourism and transportation is derived primarily from the concept of tourism as a generator of travel demand and transportation as the key to accessing major tourist attractions."
- "The key to addressing these common interests (and their ultimate implementation) is the development of effective processes for coordination between various transportation agencies, tourism agencies, other planning organizations, and private-sector interests."

This report implies that at a nationwide level, there are significant links between the tourism program and a state's transportation program. It also suggests that tourism revenue can be a significant net contributor to funding the state's transportation program through its contribution to gas tax revenue and other sources (e.g., toll revenues) of transportation funding.

F. Findings

This section summarizes the audit team's key findings as a result of its detailed analysis of the two risks identified in this study area. For ease of presentation, these findings have been divided into the following categories:

- Overall program efficiency and effectiveness.
- Organizational alignment with TxDOT's strategic direction.
- Current revenue generation opportunities.
- Potential revenue generation opportunities.
- Other operational issues and opportunities.

1. Overall program efficiency and effectiveness

Overall, the travel and tourism programs within TxDOT generally appear to be efficiently and effectively managed. This conclusion is based on a number of specific findings that are described in further detail below.

a. TIC and SRA management has been innovative and attentive to the needs of motorists resulting in high public satisfaction with both the TIC counselors and the renovated SRAs

In a number of recent customer satisfaction surveys conducted regarding TxDOT operations, the TIC staff consistently came out with the highest rating. These strong customer survey results, coupled with the name recognition developed in local communities through the effort of the production staff that assemble the travel publications, provides a very positive public image for TxDOT's travel and tourism programs throughout the state.

In addition, the travel industry itself appears to be quite pleased with TxDOT's travel and tourism programs. Interviews with industry stakeholders for this study area generally demonstrated a high degree of satisfaction with the department's programs.

b. TxDOT's net $7.6 million annual investment in its tourism program provides estimated return of $24 million plus in terms of fuel tax to Fund 6

TxDOT makes a net investment in its travel and tourism programs of approximately $7.5 million annually based on the net cost of the Travel Division publications and the

cost to operate the Travel Services Section. For FY 2007, this is based on the $7,293,391 budgeted for Travel Division publications, which is offset by anticipated revenue of $5,703,409, for a net cost of $1,589,982. The budget for the Travel Services Section is approximately $6 million.

An analysis of the return on this investment by TxDOT in its tourism programs suggests that this investment returns approximately $24 million plus in fuel tax to Fund 6 on an annual basis. Although this rate of return has not been formally measured for several years, the Travel Division had developed studies through FY2000 to estimate the amount of fuel tax that the activities of the Travel Division would generate based on its tourism and travel services operation. Exhibit VI-6 below summarizes the results of that analysis. It calculates the visitor-influenced additional miles traveled and, as a consequence, fuel tax revenue generated, based on the services and publications of the Travel Division. Projected mileage for publication computations is based on the prior year's readership surveys regarding travel activities. While this data is from FY 2000, the fundamental assumptions appear to remain valid. Thus, it is reasonable to conclude that TxDOT's return on its investment from its tourism programs would at least be as high as in FY 2000. In reality, the current return on this investment is quite likely even higher.

Exhibit VI-6: Estimated Return to Fund 6 on TxDOT Tourism Investment

Travel influenced by:	Additional Trip Mileage	Fuel Tax Revenue
Travel Information Center	171.8 million miles from 652,000 travelers averaging 263 extra miles	$3,075,052
Texas State Travel Guide	854.4 million miles	$9,862,139
Texas Highways Magazine Place Visitors	406.0 million miles	$7,221,490
Texas Highways Magazine Event Visitors	156.7 million miles	$2,903,738
Miscellaneous Mailings	97.6 million miles	$1,735,544
	Total	**$24,797,963**

c. In addition to the increase in fuel tax, TxDOT's travel and tourism programs provide a number of other tangible and intangible benefits to the state and the traveling public

Simply measuring the fuel tax contribution understates the impact of TxDOT's travel and tourism programs. Other tangible and intangible benefits from this investment include:

- Additional revenue for the travel industry and sales tax for the state and its counties and cities, resulting from additional days visitors spend in the state because of information obtained through travel publications and the TICs.
- Revenue for members of the travel industry operating attractions in smaller communities and sales tax for these smaller communities, which results from visitors going to attractions based on information received from TxDOT of which these visitors might not have been otherwise aware.
- A reduction in vehicle crashes and other improvements in driver safety resulting from the availability and attractiveness of travel information centers and safety rest areas.
- In 2005, total direct travel spending in Texas was $49.2 billion and directly supported 514,000 jobs. State and local tax revenues directly generated by travel spending were $3.4 billion in 2005, and travel spending generated an additional $3.3 billion in federal tax receipts.[6]
- Collectively, under a Memorandum of Understanding, marketing activities from the Office of the Governor, Economic Development and Tourism, Texas Commission on the Arts, Texas Historical Commission, Texas Parks and Wildlife, and Texas Department of Transportation generated approximately $25.24 per dollar invested in fiscal year 2006, accounting for both Texan and non-Texas visitor spending.[7]

d. TxDOT has been very proactive and innovative in terms of delivering the travel and tourism program

TxDOT has generally been very proactive and innovative in terms of enhancing services to citizens, identifying new revenue opportunities, and/or identifying opportunities to improve the cost effectiveness of program delivery through targeted outsourcing of non-core business functions. Examples of this innovation include:

- Implementing wireless access in TICs and SRAs and seeking to recover the cost of this service through advertising revenue.
- Renovating SRAs with federal enhancement funds to upgrade out of date structures, enhance parking facilities, update and enclose lobbies, and provide wireless Internet access for the traveling public. This renovation has increased the services available to the traveling public at safety rest areas and made these facilities safer and more comfortable. As a result, these facilities are now more attractive and inviting to travelers, thus encouraging greater use of these facilities and hopefully improving safety by encouraging travelers to take breaks while traveling. In addition, recent informal 'person on the street' interviews conducted by a television station in the San Antonio area resulted in a large number of positive comments by interviewees about the renovations to the SRAs.

[6] Dean Runyan and Associates. The Economic Impact of Travel on Texas (2006)
[7] Department of Recreation, Park and Tourism Sciences; Texas A&M University (2006)

- Seeking new revenue opportunities such as exploring revenue opportunities in non-interstate SRAs, marketing banner ads on TexTreks, etc.
- Targeted outsourcing of non-core functions such as *Texas Highways* magazine fulfillment and advertising sales, both of which extensively leverage the industry experience and skills of the outsourcing partner.

e. TxDOT's tourism program's emphasis on smaller towns has expanded tourism opportunities for smaller communities, increasing total miles traveled within the state and helping to extend the length of visits

One of the ways that the current approach of the Travel Division publications increases travel in the state is their focus on the smaller towns in Texas. By allowing minor attractions to have the same listing status as the larger ones in the *Texas State Travel Guide*, visitors are often drawn to travel more miles and see a broader area of the state than they might have otherwise. Considering the size of Texas, there are areas that might not find an audience without this assistance and the economic benefit it provides.

f. The positive outcomes being achieved by TxDOT's travel and tourism programs, however, are not as well known to policy-makers and other stakeholders as it could be; a stronger communications strategy is needed to inform a wide range of policy-makers and other stakeholders about these very favorable customer satisfaction and revenue generation outcomes; this communications strategy on travel and tourism programs should be coordinated with TxDOT's overall strategic communications plan

The high return on investment and the strong customer satisfaction with TxDOT's tourism programs is not being communicated effectively to policy-makers and other stakeholders. The department does not consistently communicate to stakeholders about the benefits consumers receive from TxDOT's travel programs and/or the financial payback these programs have for the department and the Texas travel industry. This lack of communication on program benefits contributes to questions from stakeholders about the cost-effectiveness of the department's tourism programs and the relative priority of funding these programs from Fund 6, given other pressing transportation needs that are competing for this same funding.

2. Organizational alignment with TxDOT's strategic direction

This section summarizes findings related to the organizational alignment of the travel and tourism functions with TxDOT strategic mission.

a. Clear synergies exist between TxDOT's travel and tourism programs and the strategic goals of TxDOT through extending the length of visitor stays and helping to create positive visitor experiences

TxDOT's five strategic goals are as follows:

- Reduce congestion.
- Enhance safety.
- Expand economic opportunity.
- Improve air quality.
- Increase the value of transportation assets.

The audit team identified clear links between the functions of TxDOT's Travel Division and other TxDOT travel programs and the organization's strategic goals. Each of the travel and tourism functions analyzed in this study area contribute either directly or indirectly to one or more of TxDOT's overall strategic goals.

The Travel Division's publications contribute to the development of local communities by endorsing an open program that allows small communities to gain recognition for attractions that would otherwise remain unnoticed. Whether through the magazine or the travel guide, small out-of-the-way destinations are highlighted, and traveler interest is thereby improved so that recreational travel is increased or extended based on the literature developed by the division staff. The increased number of trips that use the highways and the fuel purchased to make those additional trips plus the local businesses themselves that benefit from increased visitors all provide a return to both Fund 6 and the state's economy.

b. The interagency MOU coordinating the delivery of state tourism programs does a good job in achieving separation of functions and agency focus while coordinating tourism efforts statewide

The Sunset process that eliminated the Department of Economic Development pared down state resource commitments by reducing personnel and overhead expense required by a cabinet-level department. The current structure has a much smaller workforce operating out of the Office of the Governor and provides the statewide direction and coordination of efforts for economic development and tourism among the main five entities covered by the statewide MOU. The MOU and the strategic planning process coordinated by EDT in the Office of the Governor is implementing a cohesive strategy to address both the external and internal needs of the state to identify and promote a reason to travel to and around Texas. Each agency then executes specific missions within this overall framework. For the most part, these missions are consistent with and align well with each individual's agency overall charter and mission.

c. There is no clear alternative location for TxDOT's tourism-related functions within Texas state government

Outside of their current organizational location within TxDOT the only other logical home for most of TxDOT's travel programs (e.g., TIC, travel literature, other publications) is within the state's economic development and tourism function. In 2003, the Department of Economic Development was eliminated through the Sunset process as a cabinet-level agency, and instead, a state coordinating office for Economic Development and Tourism was created in the Office of the Governor. The intent of the ETD operation within the Office of the Governor is to serve as a policy-making and coordination function, with the individual agencies primarily serving as the service delivery function. One exception to this is the marketing of Texas outside of the state, which EDT is responsible for performing. Having the delivery of some services such as the TICs and publications within TxDOT would appear to be consistent with this overall statewide framework and direction for the state's tourism programs.

Moving the Travel Division tourism functions would require either an expansion of the staff in the Office of the Governor or the recreation of a cabinet-level department. Either of these moves would most likely require additional state staffing to provide human resources and other support services that today are provided by TxDOT.

Likewise, proposals for realignment of functions typically have a long-term implementation life cycle. Consequently, shifting of additional resources to EDT would need to be carefully assessed, given that the state is just completing the transition to the current tourism program framework. EDT has successfully established itself over the past four years in its new coordination role and, through the multi-agency MOU, is effectively coordinating the activities of the various tourism programs within the state, including integrating the publications and services of the TxDOT Travel Division.

In addition, the inclusion of travel programs within TxDOT's operations provides a number of ancillary advantages. The Publications Section, in addition to *Texas Highways* magazine and the related Audiovisual Section within the Travel Division, provide TxDOT an in-house resource which is used for development of necessary training and other literature within the organization. In addition, warehousing and distribution within the extended TxDOT network of 25 district offices is unmatched by other state organizations in terms of providing access to local communities for a positive TxDOT image to a constituency that might not otherwise be reached.

The activities of the travel information centers in particular benefit from the close organizational relationship that exists between the staff of the centers and the local district, area offices, and maintenance units. This proximity and the resources of the other parts of TxDOT work together advantageously especially in emergencies to effectively deliver services to the traveling public. The use of the welcome centers and the staffing to provide assistance to evacuees from the hurricanes that devastated New Orleans and the Gulf Coast regions are but one example of how the connectivity between Travel Division staff and the districts can help TxDOT to respond to

extraordinary situations. Finally, the long-term commitment of the agency and the relationship it has built with the travel industry are an asset that many states would love to claim.

3. Current revenue generation opportunities

a. The *Texas Accommodations Guide* is self-sustaining

The *Texas Accommodations Guide* is self-sustaining based on the most recent figures. In 2006 only 46% of the costs of operation were recaptured because the compilation and collection of listing fees was outsourced. In 2007, the work is being done in-house and the listing fees collected will amount to approximately $186,000, which will fully cover the production cost. This guide is a listing of various hotels and accommodations throughout the state and is supported by the fees charged for the listing of those facilities. The guide is part of the official state travel packet mailed out based on request and is available at the 12 TICs and other tourist information bureaus. The listing fees charged in this publication are studied on a regular basis to make sure they remain competitive to other guides available for the hotel industry.

b. *Texas Highways* magazine and the *Texas Events Calendar* are nearly self-sustaining

Based on the most recent figures available, *Texas Highways* magazine and the *Texas Events Calendar* are nearly self-sufficient. Additional details concerning each of these publications are provided below.

Texas Highways

The *Texas Highways* magazine is nearly self-sustaining and collects revenue for both subscriptions and for ads placed in the magazine plus sales of ancillary items through the magazine's travel store. These sales cover about 98% of the magazine's operation and production costs. The annual subscription rate is based on competing similar magazines and is revisited every few years to ensure that it remains competitive in the marketplace. The magazine's advertising rates are also studied regularly to ensure that that they are competitive and based on a cost per thousand that is consistent with other similar publications. It should be noted that the advertising content for the magazine is restricted by administrative code and at times limits the advertisers that would otherwise place ads.

In addition to current revenue sources, The Travel Division is currently exploring the possibility of providing digital subscriptions from the magazine web site but is still evaluating the cost of converting the content without sacrificing quality. In addition, TxDOT is exploring the use of web site banner ads that can be placed on the Texas Highways web site.

Similar magazines, such as *Arizona Highways*, also use a corporate sales program to market calendars and other stationary products using photography images and resources from their magazine. According to the *Arizona Highways* web site, "there has been no legislative appropriation or direct tax support of the magazine since 1982. The magazine operates on the funds it earns from the sales of magazines, books, calendars, and other products."

Texas Events Calendar

The *Texas Events Calendar* advertising revenue covers just over 85% of its production cost. This publication is free to visitors through the TICs or can be included with a mailing of the official state travel packet upon request. The content of ads is restricted by administrative code and at times limits the advertisers that would otherwise place ads.

c. The *Texas State Travel Guide* and the *Texas Official Travel Map* are highly subsidized

The *Texas State Travel Guide* and the *Texas Official Travel Map* are highly subsidized. The advertising revenues for the *Texas State Travel Guide* cover about 28% of its production costs. Ad content for the guide is controlled by administrative code as with the other publications. Ad revenue is limited as well, due to a conscious decision to focus content on the guide's primary purpose, which is to provide a comprehensive listing of attractions located throughout the state. The guide does not charge for attractions to be listed, keeping the guide content rich and diverse by servicing the smaller communities equally with the larger ones across the state.

The state map is produced by TxDOT and is completely subsidized both for production and distribution. It is part of the official state travel packet.

4. Potential revenue generation opportunities

a. The administrative code provisions regarding appropriate advertising in travel publications have not been updated since the mid-1990s and need to be revised to allow for new types of advertising

Chapter 204 of the Transportation Code specifies the type of advertising that can be used in *Texas Highways* and other TxDOT travel publications. These provisions are intended to ensure advertising is consistent with the purpose of the publication, consistent with the overall image and general communications strategy of the department, and aligned with the expectations of readership of the magazine and other publications. These policies are subject to interpretation and need to be revisited regularly to reflect changes in demographics, advertising industry practices and other considerations. Based on changes in these factors, it may be appropriate to possibly allow additional types of advertising. These administrative rules have not been revised

since the 1990s, although TxDOT is currently in the process of reviewing these rules and drafting potential changes for review by the Transportation Commission.

b. Some additional revenue generation opportunities may exist at the safety rest areas not located on the interstate highways

Federal law and regulations restrict commercial activities at safety rest areas located on the interstate highways. However, TxDOT has additional flexibility in terms of initiating potential commercial opportunities at the 27 SRAs not located on the interstate.

In 2001, TxDOT issued an RFP seeking proposals for commercial development of several off-interstate locations which received no credible responses. The challenge with commercial enterprise at SRAs not located on the Interstate routes is that they are generally located on roads with lower traffic volumes and in more remote areas. Many of the available sites in remote locations are more than 30 – 50 miles from a city with competing services and therefore create a risky environment for commercial ventures. One other concern involves the actual modification to the SRA facility to accommodate a commercial venture. In the event that the business failed to be viable and left the facility, TxDOT would then become responsible for maintaining or removing the unused structures.

c. Sale of banner ads on the TexTreks web site continues to represent a revenue opportunity for TxDOT, and this may be an area for an effective partnership between the Travel and Maintenance Divisions to leverage an overall agency-wide ad sales strategy

Both TICs and SRAs offer wireless Internet access to assist travelers through the TexTreks web site. This was developed by an outside contractor that provided and installed the equipment and built the web site to support links to local travel bureaus and other TxDOT resources. The contractor, however, was unsuccessful at marketing ads for the TexTreks web site and has abandoned the equipment, leaving TxDOT to maintain the network. The Maintenance Division is currently developing an RFP to find a new vendor to manage the wireless Internet capability and associated equipment based on the prospect of using banner ads to cover the vendor's costs. The RFP seeks to negate any cost for TxDOT other than for contract administration.

The difficulty in this approach is that firms with experience managing networks may not have significant ad sales experience, thus requiring the need to partner with other firms to provide this function. In addition, the Travel Division has already engaged a sales firm to sell advertising in *Texas Highways*, the *Texas Travel Guide*, and its other publications. The firm doing this ad sales work for the Travel Division has significant experience selling to the Texas travel industry. It also has the flexibility to sell advertising as a package, mixing ads in various Travel Division publications based on the unique needs and budget of the potential advertiser. Having the advertising sales firm already under contract to TxDOT to sell this advertising would leverage the

firm's experience with the travel industry and allow advertising on TexTreks to be sold as part of a package of advertising offerings agency-wide. The Maintenance Division could then focus on contracting with a provider who would be responsible for one distinct function: maintenance of the wireless Internet infrastructure across the state. Likewise, only having one firm selling advertising for TxDOT publications and web sites will prevent the department from effectively competing against itself with potential advertisers.

d. The new federal Interstate Oasis Program presents limited revenue opportunities for TxDOT, with the primary revenue potential likely to be fees for signing establishments as an oasis

A number of states and the American Association of State Highway Transportation Officials (AASHTO) have advocated for easing of restrictions on revenue-generating activities in the interstate right of way over the last several years. As part of the most recent transportation bill, Congress once again considered easing these restrictions. While Congress did not remove the restrictions on revenue generation within the right of way, it did create the concept of an interstate oasis. Section 1310 of SAFETEA-LU provides for the initiation of an interstate oasis program, which would allow states to designate facilities off the interstate right of way as an 'oasis.' These facilities would be required to offer products and services to the public, 24-hour access to restrooms, and parking for automobiles and heavy trucks, and meet other standards currently being finalized by FHWA.

Our analysis suggests that the interstate oasis could provide some limited revenue opportunities to TxDOT. Conceivably, TxDOT could itself construct and contract for operation of oasis facilities off the interstate right of way, obtaining a share of the contracted operator's revenue. More likely, however, TxDOT would allow the private sector to develop and operate oasis facilities, either by designating existing facilities as an oasis and/or by developing new facilities that meet the standards to be called an oasis.

Based on the assumption of private sector ownership and operation of the oasis program, the revenue opportunity for TxDOT would be principally related to the designation and signing of the oasis. A sign with an oasis-like design would be placed at an exit to designate that a combination of services and businesses exist at a designated interchange. Fees similar to those charged for the LOGOS program could potentially be charged for identifying an interchange location as an oasis. Such fees could cover the costs for fabrication, erection, and the maintenance of the sign. As with the LOGOS program, the marketing could be conducted by an outside contractor.

e. TxDOT is currently limited by statute in its ability to provide travel centers and other traveler services as part of the design of the proposed new toll roads being developed throughout the state. This represents both a potential customer service issue and a lost revenue opportunity for TxDOT

The opportunities for providing traveler services and facilities along planned toll roads need further study and consideration. Currently, however, TxDOT is limited statutorily in terms of the facilities and services it can provide.

The Texas Turnpike Authority originally included travel centers in its plans for toll roads. The plans for these centers, however, were dropped when the legislature took action to restrict services such as restaurants and gas stations on the toll roads. The statute was later modified to be less restrictive, but the program remained controversial and therefore has not progressed. HB2702 addressed privately operated service centers that could be developed adjacent to the Trans-Texas Corridor, but it did not specifically address TxDOT-operated travel centers. The following is a summary of provisions relating to privately developed service centers:

- CDAs between TxDOT and private entities are prohibited from including ancillary facilities (e.g., gas station, hotel, restaurant) used for commercial purposes.
- To protect local businesses and property rights, TxDOT may not acquire property for any commercial ancillary facility unless that facility is between the main lanes of the corridor, directly benefits corridor motorists and is more than ten miles from an interstate highway intersection or Trans Texas Corridor intersection.
- The owners of private property acquired by TxDOT along the Trans Texas Corridor may retain the right to develop that property in accordance with TxDOT's development plan.
- TxDOT is prohibited from spending general revenue to construct or purchase non-highway facilities, unless specifically line-item, appropriated by the Texas Legislature.
- TxDOT may not limit access to the Trans Texas Corridor in order to benefit the economic viability of an ancillary facility.
- In addition to roads, TxDOT may purchase land for ROW, environmental mitigation, buffer zones for scenic or safety purposes, possible future expansion, or provide a location for an ancillary facility (gas stations, restaurants, hotels, or other commercial facilities).
- Land may be condemned only for ancillary facility use through the respective county commissioners.
- If TxDOT purchases land not immediately needed, it is encouraged to lease back the land for agricultural or recreational use.

The current statutes are overly restrictive in comparison to practices in other states and may limit the services that could be available to the traveling public, especially on toll facilities in more rural or less developed areas of the state. The audit team believes that toll roads under development, especially those located outside of urbanized areas have a potential to be developed with full facility service centers providing fuel and food within the right of way. These centers could also provide tourist information and have counselors available as in the existing TICs. This is a model that has been followed on a number of toll roads in the Midwest and Eastern United States, such as the Kansas Turnpike, New Jersey Turnpike, New York State Thruway, Ohio Turnpike, and Pennsylvania Turnpike, among others.

Some portion of TxDOT's share of revenue from any services centers could be then allocated to the cost of operating the tourism programs either at the specific travel plaza on the toll road and/or providing revenue to help underwrite the total cost of TxDOT's tourism program. Requirements that dictate that revenue from a comprehensive development agreement (CDA) must be spent in the specific district where it is generated will have to be taken into consideration in allocating revenue from potential facilities. These restrictions would likely not apply to toll facilities constructed by TxDOT itself.

5. Other operational issues and opportunities

a. Outsourcing the management of rack space in TICs and possibly expanding rack space to some SRAs could reduce the burden on travel counselors at the TICs, while simultaneously providing for wider distribution of travel information through safety rest areas; however, it would not likely constitute a revenue opportunity for TxDOT

Currently, only TICs distribute brochures. There is an approval process for the brochures that are placed in the rack, but there is no fee. Brochures are sent to TICs, then displayed by TIC staff who are responsible for managing the racks. SRAs currently do not distribute brochures, although a number of the newer SRA facilities have enclosed lobbies with wall displays.

One option that could be explored is the outsourcing of the management of the rack space and the expansion of the distribution network to include at least some SRA facilities that have enclosed lobbies. Under this arrangement, the outsourcing contractor would charge a fee to participating attractions for stocking their brochures. There could potentially be one or more fee levels (for example, one fee to distribute brochures at the TICs only, with a higher fee for distribution at all or some of the participating SRAs).

What makes this approach viable is the opportunity for the vendor to provide this service at a net zero cost to TxDOT. This would mean that the vendor would charge for the rack space as a means to recover its expenses for maintaining and stocking the racks.

Depending on how the contract is structured, the current content standards can remain the same if TxDOT adopts a policy that the displays remain the same throughout all the SRAs and TICs regardless of region. Likewise, having the vendor handle collection and stocking would not add administrative duties on TxDOT staff. In addition, this program could be extended to the SRAs with enclosed lobbies to protect the racks and brochures from weather conditions. As the SRAs are renovated and lobbies are provided, racks may be placed accordingly. By having an outside vendor fulfill this function and expand the rack service to the SRAs, it would improve the information services provided to the driving public across the state and assist the travel counselor staff at the TICs to be more available for other assigned responsibilities.

The benefits of this arrangement could include:

- Reduced effort on the part of TIC staff to manage and maintain the racks. This will provide TIC staff with more time to work with the traveling public coming into the TICs and to act as part of the Level 1 help desk function identified in the Call Center study area of this performance audit (please refer to Section V.H.2).
- Wider distribution of travel literature for attractions through expansion of the racks to the SRAs.
- Increased availability of information for the traveling public on various attractions statewide by making this information available through SRAs.

The stakeholder team, however, expressed a number of concerns about the feasibility of charging for the rack space and extending brochures to the SRAs. These concerns include:

- There would not likely be a revenue opportunity for TxDOT. The fee charged by the vendor for a service currently provided by TxDOT for free would simply cover the cost of having a third-party vendor maintain and stock the racks.
- The travel industry would now have to pay for a service that is currently provided at no charge, though the opportunity for wider distribution of brochures may be viewed by some attractions as at least a partial offset for the increased advertising cost.
- Attractions in smaller communities or in rural areas of Texas would very likely be unwilling or unable to pay the vendor’s fee; as a result, display diversity would suffer.
- Publication displays might become regionalized and not distributed evenly across the state as is the case under the current system, because some regions of the state offer fewer attractions in their vicinities.
- An in-house implementation would add administrative overhead to collect fees, train staff to maintain inventory, police the racks, and provide ongoing customer service to assure that the paid for services are delivered.

- Tourism materials distributed from SRAs would compete with the established visitors bureaus located in many towns and cities throughout Texas.
- SRAs are basically unmanned, and this would make it more difficult to maintain the consistency of the information and ensure only approved/appropriate brochures appear in the racks.
- SRAs would also likely experience additional litter challenges from unsupervised racks, creating additional maintenance challenges that are not experienced now.
- If the stocking and maintenance of the racks were outsourced, the existing controls applied to authorized materials could be compromised.
- If a vendor had a statewide contract for managing the racks, it is questionable if the vendor could maintain individual racks more than once a day or even more than once a week. Under this scenario, the travel industry would still have to ship to the vendor instead of to TxDOT, but now the travel industry would need to pay a vendor to warehouse the literature and display it at the TICs. What if the slot for an attraction was empty? The travel industry must now pay to play, the traveler does not obtain the information he needs if all of the brochures have been distributed for that day or week, and TxDOT's customer service is diminished.

b. TICs and SRAs have similar maintenance needs, but utilize different approaches for contracting for facilities maintenance

The TICs and SRAs have the same basic maintenance needs. These include grounds maintenance, trash pick-up and collection, restroom stocking and cleaning, and general maintenance of the facility. Currently, facilities maintenance for the SRAs is provided through a group of contract vendors that serve to cover the entire state. The Travel Division, on the other hand, contracts with individual vendors for the maintenance of each TIC and coordinates with the Maintenance Division for special needs at each TIC, funded directly from the Travel Division budget.

This appears to be an area where the routine services for which TxDOT is contracting at the 86 SRAs could be easily extended to cover the 12 TICs, thus reducing the number of contracts that TxDOT must manage and potentially gaining some cost efficiencies through the SRA maintenance vendors having additional economies of scale. However, there are additional considerations that would need to be taken into account in the maintenance contracts for the TICs, based on the different volume and type of visitors that frequent the centers. It would also be important to ensure that maintenance services at TICs continue to receive the same priority as today, even if a contractor is maintaining both a TIC and various SRAs within a geographic area. This could be accomplished by establishing clear level of services for maintenance of TIC facilities and incorporating these service levels as performance measures in any contract. In addition, the budget for maintaining the TICs could be kept within the Travel Division and simply used as one of the funding sources for the consolidated contracts.

c. There is a need for enhanced data coordination between TxDOT publications and the state web site to be more efficient in providing current information to resident and non-resident tourists

This issue involves the lack of synchronization between data found on the Texas Tourism web site and information found in the *Texas State Travel Guide*, *Texas Accommodations Guide*, and the *Texas Events Calendar*.

The data is collected and maintained for the publications, then utilized to populate about 70% of the official state tourism site managed by EDT. New material that appears in the annual guide is slow to migrate to the web site. At the time of our review in April 2007, the new approved attractions added to the 2007 edition that went to print in November of 2006 were not yet included in the web site.

With an increasing number of travelers using the Internet to plan trips and the state providing free wireless and kiosk Internet access in its travel information centers and safety rest areas, there is a need to provide more timely Internet access to information regarding events and attractions. This could be accomplished by developing an integrated system that would ensure that newly qualified attractions and updates are available online as soon as approval is granted. Under this approach, the printed publication would be secondary to the online information available, as opposed to the current approach, wherein the printed material in effect drives postings to the web site.

To achieve more timely online updates, the data collected for the various publications needs to be consolidated, where possible, into one or more databases that can be accessed for all the functions of the Travel Division and EDT. While there is an investment in time, effort, and money, the return would be easily measured in the ease of applying updates to the system and extracting information for publications and in the currency of data regarding events and attractions across all distribution points.

Likewise, a coordinated system is not in place to transfer the data between the points of collection in the Travel Division to the state web site. This could involve the use of the database(s) described above or a manual method for EDT to receive the updates that can be incorporated into its format on the state's web site.

G. Recommendations

This section presents our recommendations resulting from our detailed review of the Travel Divisions' tourism and travel services functions and the Maintenance Divisions Safety Rest Area Program. These recommendations were developed based upon evaluation criteria established during the Risk Assessment phase of the audit.

Exhibit VI-7 summarizes our proposed recommendations and presents our suggested timing for implementing the proposed recommendations that involve potential changes to current operations. Each of these recommendations is then discussed in further detail below.

Exhibit VI-7: Suggested Timeline for Proposed Recommendations

Recommendation	Within 12 months	Within 24 months
Continue to house travel and tourism programs within TxDOT		
Conduct regular formal ROI studies for Travel Division publications and services	✓	
Continue exploration of commercial/revenue-generating activities at SRAs not located on an interstate highway		✓
Utilize TxDOT's existing advertising sales contract and channels to market banner ads on TexTreks	✓	
Explore opportunities for obtaining passive revenue through TexTreks or existing kiosks at SRAs	✓	
Initiate use of banner advertising for Texas Highways web site and digital subscriptions to Texas Highways	✓	
Market additional Texas Highways-related products through the magazine's web site		✓
Complete review of administrative code restrictions on advertising in TxDOT travel publications	✓	
Conduct a feasibility study to evaluate the potential for using an outside vendor to manage and restock brochure racks at TICs and potentially some SRAs	✓	
Develop a departmental strategy related to traveler services to be provided on toll road facilities and how revenue resulting from these services will be allocated; request statutory changes to support implementation of this program as required		✓

Recommendation	Within 12 months	Within 24 months
Consolidate data collected for the various publications into one or more databases to facilitate access and currency of information and ease, and improve timeliness of transfer to the state's web site		✓

1. The travel and tourism programs should remain housed within TxDOT

Based on our analysis, the study team recommends that the travel and tourism programs that are currently housed within TxDOT remain within the department.

One of the key questions in this study area was to assess the organizational fit of the travel and tourism programs with TxDOT's overall mission. The study team believes that there is a strong alignment between the travel and tourism programs provided by TxDOT and the department's strategic objectives. The department's tourism programs at a minimum play a role in meeting TxDOT's strategic objectives to reduce congestion; enhance safety and expand economic opportunity. This is accomplished when the traveling public uses information provided by TxDOT's Travel Division to plan their visit to the state, stay longer than originally planned based on travel information provided by the department, find and utilize services they need during their stays, and then use information provided by TxDOT to drive safely throughout the state during their visits.

In addition, TxDOT's travel and tourism program are significant net contributors ($24 million plus) to the funding of transportation programs. Likewise, these programs as currently organized are highly rated by both consumers and the travel industry in Texas. Finally, there is no other clear location within Texas government to place these functions. The most likely alternative would be to transfer some portions of the travel services and publications functions from TxDOT to EDT within the Office of the Governor. However, this would require scaling-up this organization and would mean a loss of some of the administrative economies of scale currently being achieved by the travel and tourism programs leveraging the support services available within TxDOT.

2. TxDOT should regularly conduct formal return on investment (ROI) studies for Travel Division publications and services and proactively communicate the results of these studies to stakeholders

Prior to the latest state reorganization of the tourism function in 2003, brought on by the Sunset provisions that terminated the Department of Economic Development, the Travel Division evaluated all its publications to assure it was being effective in returning revenue to Fund 6 by contributing to fuel tax revenue. Since 2003, there have not been any studies to document the impact of the services provided by TxDOT's Travel Division other than the travel guide, which is evaluated by EDT.

Currently, conducting research for these types of studies is the responsibility of the EDT under the MOU coordinating state tourism activities. Based on studies conducted before 2000, the audit team found evidence that the publications and services now provided by the Travel Division provided additional fuel tax revenue of approximately $24.7 million dollars annually. This research needs to be reinitiated to continue to determine on an annual basis the ROI for the travel and tourism programs being sponsored by TxDOT as a means to determine the effectiveness of the programs, as well as a way to measure the net benefits of these programs to the department. It is recommended by the study team that TxDOT should either request that EDT conduct this research and modify the MOU accordingly, or alternatively, TxDOT, potentially as a joint-effort of the Travel Division and Government and Business Enterprise, should conduct this research itself.

The results of this research should then be presented to stakeholders in a variety of formats, including: the *TxDOT Annual Summary*, presentations to and briefing materials for legislators and legislative staff, the Travel Division web site, and other department publications such as *Keeping Texas Moving* and *Horizons*.

Several activities will be critical to ensuring the effectiveness of this communication effort. This includes:

- Engaging in regular communication between the Travel Division and the impending Government and Public Affairs Division to plan and coordinate communication strategies.
- Strategically targeting communication efforts to ensure that information is effectively delivered to intended audiences.
- Ensuring that communication efforts on travel and tourism programs align with a department-wide strategic communication plan that promotes TxDOT's goals and priorities.

3. TxDOT should continue exploration of commercial activities at SRAs not located on an interstate highway

Continuing to explore commercial opportunities at safety rest areas not located on the interstate system is another area for potential revenue generation. Although many of these SRAs are found in remote locations, there is still a possibility that outside commercial interests could be combined with the existing facilities to benefit drivers, businesses, and TxDOT. The audit team believes that additional efforts must be made to solicit this type of activity, through a new RFP or other means, as a way to continue exploration for business ventures that could be combined within the non-interstate SRAs.

4. TxDOT should utilize the Travel Division's existing advertising sales channels to market the sale of banner ads for the TexTreks web site, thus better leveraging other existing advertising sales activities for the department's travel publications

The study team recommends that TxDOT continue to actively pursue the use of banner ads and other services through the wireless Internet access provided at all SRAs and TICs to generate revenue. However, the study team recommends that TxDOT utilize its existing advertising sales channels rather than creating a new sales channel for the banner ads through a separate RFP process. Revenue generated by the existing ad sales contractor would then be used to help offset the department's cost to operate the wireless service and maintain the hardware and network infrastructure required to support the wireless service. Under this model, the Travel Division would take responsibility for the content and sales of banner advertising, with the Maintenance Division owning responsibility for operating the service itself.

We believe this approach provides a number of benefits for the department, including:

- Leveraging the experience with the travel industry and contacts within this industry of the Travel Division's current advertising sales contractor.
- Achieving economies of scale and reducing the cost to the department because the current advertising sales contractor is already calling on many of the potential advertisers who would be candidates to advertise on TexTreks.
- Allowing advertising in TexTreks to be sold as part of a package of advertising in multiple department publications, with the mix of advertising across all media tailored to the needs and budget of the potential advertiser.
- Allowing TxDOT's Maintenance Division to issue a much more focused RFP for only operation of the wireless service and maintenance of the equipment.
- Allowing TxDOT's Maintenance Division to focus its efforts on managing the operation of the wireless service versus overseeing a contractor selling advertising, given that the Travel Division already has staff who are knowledgeable about advertising sales and the sale of this advertising to the travel industry.

5. TxDOT should also explore opportunities for obtaining passive revenue through the TexTreks web site and/or existing SRA kiosks

As an extension of the sale of banner advertisements, it is recommended that TxDOT should, working with the advertising sales contractor, negotiate revenue sharing with TxDOT for completed transactions driven through the banner advertising. This could, as an example, include hotel reservations booked by a traveler who was directed to the hotel's web site through a banner advertisement. Another example is a commission on reservations booked from or attraction tickets purchased at existing SRA kiosks.

6. TxDOT should initiate banner advertising and digital subscriptions for *Texas Highways*

The study team recommends that The *Texas Highways* web site should initiate the use of banner ads and market digital subscriptions to the magazine.

Banner advertising on the web site provides an opportunity to supplement the revenue generated through the *Texas Highways* web site. This step would be consistent with practices currently in use or being initiated by similar tourism-related publications across the nation. It could also leverage and complement the TexTreks ad sales effort discussed in Section VI.G.4 above.

Along with other magazines nationally, TxDOT needs to proceed toward making the *Texas Highways* magazine available through digital subscription. With an ever-increasing Internet-savvy public expecting rapid quality dissemination of information, this should not be overlooked.

The audit team found that TxDOT was studying both of these approaches but has not yet made the commitment to implement these concepts. We would recommend that the department move forward immediately with both of these initiatives.

7. The *Texas Highways* magazine should use its content and photography to market additional products and services through their web site

Along with digital subscriptions the *Texas Highways* magazine needs to pursue the opportunity to market additional products and services such as books, maps, cards, calendars, clothing, and motivational materials and posters toward a corporate marketplace from the *Texas Highways* web site. *Arizona Highways* currently produces over 40% of its revenue by marketing these types of additional services on its web site.

8. The Travel Division should complete its review of the administrative code restrictions on advertising for TxDOT's travel publications

TxDOT should complete its ongoing review of the administrative code concerning which types of advertising are allowed in the department's travel publications. This review should attempt to identify opportunities for reducing the restrictions on advertising to the extent possible without adversely affecting the image or focus of the department's various travel publications.

9. TxDOT should conduct a feasibility study to evaluate the potential for using an outside vendor to manage and replenish brochure racks at the TICs, with a possible expansion to SRAs

Charging for brochure rack space and the outsourcing of the brochure racks at the TICs should be explored further. By issuing a solicitation that allows for net zero cost to TxDOT, similar to California's, a vendor could be contracted who would not only stock the racks but who would be responsible for the collection of the rack fees to pay for the stocking. Outsourcing this function would relieve the travel counselors in the TICs of the need to stock and police the racks, allowing them to focus on other duties.

This effort could then be expanded in the same manner to the renovated SRAs that have an appropriate indoor location for rack space. Expansion to the SRAs would represent a significant increase in the provision of tourist information, because there is currently no brochure information available at SRAs.

Based on discussions with the stakeholder team during the study process, the audit team recognizes that both TxDOT staff and the travel industry have some significant concerns about the use of an outsourced provider and the establishment of a fee for the rack space. Likewise, there are also some concerns about the viability and effectiveness of expanding the rack program into the SRAs.

To assess the viability of this strategy, it is recommended that TxDOT conduct a feasibility study of this concept. This feasibility study should include a survey of the Texas travel industry to gauge issues and concerns and informal discussions with potential vendors who could provide this type of service. A team consisting of Travel Division staff, Maintenance Division staff, and representatives of the travel industry should guide this effort and evaluate the results of the study.

10. TxDOT should develop a departmental strategy related to traveler services to be provided on toll road facilities and how the revenue resulting from these services will be allocated; the department should then request statutory changes from the Texas legislature as required to implement this strategy

It is recommended that TxDOT undertake a multi-divisional effort to identify the requirements for traveler services that should be provided on different types of toll facilities (e.g., inter-city, urban). These traveler services could include commercial facilities, as well as non revenue generating services such as those currently provided in TICs and SRAs. As part of this effort, the department should determine how revenue would be shared with private sector partners and the potential for utilizing potential revenue from these programs to underwrite the overall travel and tourism program within TxDOT. Where possible, though, revenue from new traveler facilities and services should be used to help subsidize the travel and tourism program, thus reducing the amount of funding required directly from Fund 6.

Representatives from a number of TxDOT divisions, such as the Travel Division, Maintenance Division, and the Turnpike Authority, as well as travel industry representatives should participate in this planning and scoping effort. Surveys and focus groups should also be used in this process to gauge customer expectations and requirements for services.

Based on the results of this planning effort, TxDOT should then request statutory changes as necessary from the legislature to allow for implementation of the proposed program. The audit team believes that additional flexibility for TxDOT in providing traveler services, especially in rural and less developed areas of the state, would provide the potential for a much higher level of service to the traveling public, be consistent with travelers expectations based on experiences in other states, and potentially provide additional revenue to help offset the cost of operating the department.

11. TxDOT should evaluate the data collected for the *Accommodations Guide*, *Texas State Travel Guide*, and *Texas Events Calendar* for potential consolidation into one or more databases, in order to facilitate access and currency of the information, ease the transfer of the data to the state's web site, and facilitate publication of this information

Several publications are produced in the Travel Division by a small efficient staff. Each edition of the various publications is compiled and prepared separately by the appropriate staff. The information gathered for the *Accommodations Guide*, *Texas State Travel Guide*, and the *Texas Events Calendar*, including attractions, events and accommodations listings for the entire state, is then potentially made available to EDT for inclusion on their web site. While the magazines each have very separate purposes, content, and subscribers, they are all related to tourism for the state. Consideration needs to be given to consolidating the data into one or more databases that enhances data sharing between the publications and with external sources. A holistic approach to designing the database would be to put all the data in one source location and then draw upon various slices of the data for the various functionalities. This allows fields that should be synchronized to be consolidated which enhances currency of the data and eliminates redundant data entry. Consolidation, as appropriate, would also streamline the process for interface of data into Texas Tourism web site as desired.

Storing data on a larger, more stable technology platform(s) will provide additional opportunities for future interface needs during the publication process based on the electronic availability of the source data. Provided that the information is available in a secure format, pre-determined pieces of information could also be potentially updated by the content provider or travel industry representative rather than TxDOT staff. This could involve updating data such as operating hours of an attraction, phone numbers, addresses, and features offered at an attraction or accommodation site. While an upfront investment will be needed to define and build this cooperative database, the

return on the investment is long term both in terms of staff efficiencies for TxDOT and EDT and the improved timeliness and increased accuracy of information provided to the traveling public.

12. TxDOT should consolidate the contracting process for facilities management and maintenance contracts for and TICs and SRAs

The process for contracting for facilities upkeep and maintenance for TICs and SRAs should be consolidated into a single process managed by the Maintenance Division as the lead, with substantial input from the Travel Division staff. To ensure that TICs receive appropriate priority, clear performance standards for TICs should be included in the contract, and separate budget items, within the Travel Division budget, should be maintained and utilized as a source of the funds to cover contracted services provided to TICs. The consolidation of the facilities management and maintenance contracting processes for TICs and SRAs has the following advantages:

- It provides the potential for reducing the total cost to TxDOT of maintaining both TICs and SRAs by gaining the benefits of some economies of scale that the contracted vendors may achieve by maintaining the additional TIC in areas where they are already maintaining SRAs in that district or adjoining districts.
- It reduces the administrative effort of the department to acquire and manage the outsourced services by consolidating multiple, similar contracting processes.
- It better leverages the knowledge of staff in the Maintenance Division who are more experienced in contracting for facilities management, and it allows the Travel Division staff to focus on the delivery of travel and tourism program services.

VII. Study Area #6: Consolidation of Grants Management Functions, Including Potential Shifting of Some Responsibilities to Grantees through Increased Use of Self-Certification

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TxDOT operates grant or grant-like programs in the areas of public transportation, traffic safety, auto theft prevention, and transportation enhancements. These programs are managed by four different TxDOT divisions. The public transportation grants program is managed by the Public Transportation Division (PTN). Traffic Safety grants and related activities are managed by the Traffic Safety Section of the Traffic Operations Division (TRF). The automobile theft prevention grants program is managed by the staff of the Texas Automobile Theft Prevention Authority (ATPA), which is an independent governing board, situated within TxDOT's Vehicle Titling and Registration Division. The transportation enhancement program is managed by TxDOT's Design Division.

Policies and procedures for grant selection and administration are adopted into the Texas Administrative Code (TAC) by the Transportation Commission based on appropriate federal and state laws and regulations. Guidance on these policies is provided by headquarters staff. Assigned staff in each district support the operational execution of the public transportation, traffic safety and transportation enhancement programs. The automobile theft prevention grants program is completely managed centrally.

During the initial risk assessment process, the audit team identified and documented the following program risks:

- **GR1**: Limited grants or contracts management experience and/or training for district staff responsible for administering various grant programs.
- **MP3**: Dependence on technology to implement critical business change.

To address these risks in more detail, the audit team defined a study area to assess the potential for greater operational efficiencies and other synergies in managing the department's various grant or grant-like programs. This included analyzing the feasibility of managing the public transportation and traffic safety grant programs through the establishment of a common contracts/grants management function across grant programs at the district level. The study area was also designed to analyze the potential to privatize all or part of this contracts management function, as well as to examine the extent to which there would be any advantage to developing this contracts management function on a regionalized basis versus it being established in each district. This study area also evaluated the potential for shared processes/procedures and training across TxDOT's various programs and the applicability of technology to managing these programs, including the feasibility of leveraging Traffic Safety's ongoing eGrants software

implementation to other grant programs. Finally, the study area investigated the potential for increased self-certification by grantees, including the extent to which this may be allowed under Federal Transit Administration (FTA), Federal Highway Administration (FHWA), and National Highway Traffic Safety Administration (NHTSA) program regulations, the potential risks to TxDOT of self-certification, and approaches to mitigate the risks identified.

A. Summary of Findings and Recommendations

As part of this study area, the Dye Management Group, Inc. audit team conducted an in-depth review of all grant functions currently performed in individual units. Interviews with management, staff, and external stakeholders were conducted and materials reviewed to obtain a detailed overall interpretation of the facts and issues that were facing the employees and clients of the section.

A stakeholders group consisting of TxDOT staff and external stakeholders was convened to review audit findings and to provide guidance and input to the audit team. The stakeholder group reached a consensus opinion that the findings gathered by the audit team accurately represented the functional processes, procedures and pertinent issues of the grants management function.

These key findings are presented in detail in the following pages but are generally summarized as follows:

- Grant programs operate autonomously in each division and are therefore missing opportunities to share best practices, address issues of common interest, and ensure consistency.
- There is inconsistency in the use of position descriptions for assigning district office staff which can result in staff not fully understanding or being qualified to perform grant management oversight functions.
- TxDOT has made improvements in the training of staff but could do more to improve the productivity and effectiveness of its staff, particularly in district offices.
- TxDOT's grants programs make limited use of performance measures and generally do not effectively link these performance measures where they are measured into the grant selection process.
- With the exception of Traffic Safety, TxDOT grant programs are not making full use of effective practices involving electronic grants management tools.
- Traffic Safety's eGrants initiative is expected to provide improve the efficiency and effectiveness of the grants management process for both TxDOT and grantees.
- Traffic Safety and Public Transportation grant programs have been have experiencing growth (in terms of dollar amount of grants and number of projects/grantees managed) relative to staffing levels and operating budgets.

- Transportation enhancement projects have very lengthy project lifecycles, which complicates the administration and oversight of these projects and management of the overall program.

Recommendations were then developed based upon the findings and an analysis of a set of detailed strategies and models that had been reviewed by the stakeholder group. These recommendations are presented in detail in the following pages but are generally summarized as follows:

- The audit team recommends that TxDOT maintain its current district-based structure for managing the oversight of public transportation and traffic safety grants and the enhancement program.
- The audit team recommends that TxDOT create a 'Grants Management Coordination Team' to standardize and coordinate grant management processes across program areas.
- It is recommended that TxDOT establish a set of common grants management processes and associated outcome measures for implementation across program areas.
- The audit team recommends that TxDOT implement the eGrants system and processes for the public transportation and auto theft prevention grants programs. The eGrants system should not be implemented for the enhancement program. However, the applicability of the eGrants application to the enhancement program should be re-assessed if new calls for projects are initiated for this program.
- The audit team recommends that the department establish standard 'grants management' position criteria for use in selecting and assigning district office staff.
- It is recommended that TxDOT continue to make improvements to its training efforts, especially of district office staff. As part of this effort, the audit team recommends that TxDOT work towards obtaining grants management certifications for their grants management staff as the National Grants Management Association Body of Knowledge and its associated professional certification program matures.
- The audit team recommends that the department utilize self-certification techniques in selective low risk areas to build grantee management capacity and to allow agency staff to focus monitoring efforts in high risk areas
- It is recommended that the TxDOT work with recipients to establish reasonable start and completion timeframes for projects as part of the contract agreement process

The remainder of this chapter provides an overview of the grant programs area, a summary of the key research questions, and a detailed discussion of the risks identified by the audit team in the grant programs area. It also includes a review of best management practices from peer states and other organizations, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

TxDOT administers a number of federal and state funded grant or grant-like programs in six divisions serving a variety purposes. Four of these specific programs were included in the scope of this study area as follows:

- Public Transportation Grants.
- Traffic Safety Grants.
- Auto Theft Prevention Grants.
- Transportation Enhancement Program.

The scope of this study area did not include grants related to air quality or airports.

Exhibit VII-1 provides a summary of the size of each of these grant programs, based on information provided by each grant program to the study team.

Exhibit VII-1: TxDOT Grant Programs Profiles

Grant Program (Division)	Dollar Amount of Grant Funds Awarded/Expended (FY 2006)	Number of Projects Awarded/Managed (FY 2006)
Public Transportation Grants (Public Transportation Division)	$67.2 million	280*
Traffic Safety Grants (Traffic Operations Division)	$29.2 million	299
Auto Theft Prevention Grants (Vehicle Title and Registration Division)	$11.8 million	32
Transportation Enhancement Program (Design Division)	$155 million*	117**

*Estimated number of grant contracts with main providers based on data for FY 2006 provided by Public Transportation Division.

**For the Transportation Enhancement program, the information provided is for awards made in FY 2001. Including these projects and projects awarded in prior years, 43 enhancement projects are currently under construction and 90 projects are pending letting dates.

In Texas, the grants management and administrative functions and processes for grants programs, in addition to any state and federal requirements which may be specified for individual programs, are prescribed by:

- The Uniform Grants Management Act of 1981 which addresses federal requirements but which also applies to state funded grant programs.
- The Uniform Grants Management Standards (UGMS) promulgated by the State Grants Team, Governor's Office of Budget and Planning, revised in June 2004, which incorporates the following federal Office of Management and Budget (OMB) circulars:
  - 2 CFR Part 225 (previously A-87).
  - A-102.
  - A-133.

The remainder of this section provides an overview of each of the grant programs in the scope of this study area including program objectives, customers, stakeholders, service delivery channels, and major trends.

1. Public transportation grants

TxDOT's Public Transportation Division (PTN) administers a number of federal grant programs, as well as state dollars appropriated for transit projects. Descriptions of the various grants are included below.

a. Planning and Research Grants Program

Section 5303 funds are provided to metropolitan planning organizations (MPOs) through TxDOT for transit or highway planning activities. Section 5304 monies are awarded to TxDOT for statewide transit planning and research activities. Section 5303 funds are administered in concert with the Federal Highway Administration (FHWA) 112 planning funds through the Transportation Planning and Programming Division. The Public Transportation Division monitors transit activities and submits required reports to the Federal Transit Administration (FTA). The funding ratio is 80% federal and 20% state match for both Section 5303 and Section 5304.

b. Small Urbanized Grants Program (Urbanized Areas of 50,000+ population)

The purpose of these grants is for public transportation in urbanized areas with populations over 50,000. Funds are distributed by FTA using a formula based on population and population density. In areas with a population of over 200,000, grants are awarded by FTA directly to local recipients. Grants for urbanized areas with populations under 200,000 may be made to the Governor or to local recipients designated by the Governor. Currently, the cities make application directly to FTA. Section 5307 is the major federal funding source for urbanized transit properties. Non-obligated funds may be transferred to another Section 5307 recipient or to the Section 5311 program.

The funding ratio for capital acquisition and planning is 80% federal maximum and 20% state/local match on most projects. Elderly and disabled projects may receive up to 95% federal funding.

The funding ratio for administrative and operations is 50% of the maximum federal share and 50% state/local match.

c. Discretionary Capital Grants Program

Section 5309 provides funds for new rail systems, modifications for existing rail systems, and assistance for bus systems. This program is highly competitive and in some fiscal years Congress has earmarked all the available dollars for specific projects. Individual urbanized transit operators send applications directly to the FTA. However, except in the case of Congressional earmarks, non-urbanized Section 5309 proposals are submitted by TxDOT who then administers discretionary capital grants or loans to states and local public bodies.

The funding ratio is 80% federal and 20% state/local on most projects. However, FTA encourages applicants to develop a greater non-federal match to secure Section 5309 funding. Projects that address Americans with Disabilities Act (ADA) requirements may receive 90% federal funding.

d. Elderly and Disabled Grants Program

The elderly and disabled grants program offers capital grants or loans for the provision of services to elderly persons and/or persons with disabilities. TxDOT has been designated by the Governor to administer the Section 5310 program and the grants are typically used to purchase vans (many of which are lift-equipped) and ancillary equipment such as radios.

The funding ratio is 80% federal maximum and 20% local match. The Section 5310 program is undergoing a major redesign at present to meet federal requirements for strengthened coordination requirements for local recipients. Refinements are also necessary to ensure that federal planning requirements are met. Eligible recipients include private nonprofit organizations or associations; public bodies that coordinate services for the elderly and/or disabled; or any public body that certifies that nonprofit organizations in the area are not readily available to carry out the services.

e. Non-urbanized (Rural) Grants Program

The non-urbanized (rural) grants program offers grants for public transportation in non-urbanized areas. Eligible recipients include state agencies, local public bodies, private nonprofit organizations, Indian tribes and groups, and operators of public transportation services. TxDOT has been designated by the Governor to administer the Section 5311 program and unless the Governor certifies to the FTA that intercity bus

service needs are being met, 15% of the allocation must be reserved for the development and support of intercity bus transportation.

The funding ratio for capital, planning, and administration is 80% federal maximum and 20% state/local match on most projects although ADA projects may receive up to 90% federal funding. The funding ratio for operations has a 50% maximum federal share and 50% state/local match.

The Rural Transit Assistance Program (RTAP), although separate, is often considered a component of the non-urbanized grants program. RTAP grants can provide a vast array of services to provide technical assistance to rural agencies. The most common assistance is training and assistance with travel to training that is administered under the Transit Training Scholarship Program. This program is designed to give transit agencies the opportunity to send employees to transit related training and obtain reimbursement for training and travel related expenses. The funding ratio for these grants is 100% federal with no match required.

f. United We Ride Grants Program

The Federal Transit Administration (FTA) accepted the TxDOT proposal for a $75,000 United We Ride (UWR) grant. The UWR program is a federal interagency national initiative to foster transportation coordination and break down barriers between federal transit and human service programs.

g. Job Access and Reverse Commute Grants Program

Job Access and Reverse Commute (JARC) is a two-part grant program that assists in developing new or expanded work transportation services. Job Access grants connect welfare recipients and other low-income persons to jobs and other employment-related services. JARC grants serve all income groups with transportation to suburban employment centers. Eligible recipients are those entities who agree to provide transportation services designed to meet the JARC project guidelines, including states, local governments, metropolitan planning organizations, public transit agencies, private nonprofits, and Indian tribal organizations.

JARC requires a 50% non-federal match. Unrestricted federal funds from federal programs other than United States Department of Transportation (USDOT) sources may be used to match USDOT funds for this program.

h. New Freedom Grants Program

New Freedom (NF) is a grant program which assists public transportation projects that provide both new public transportation (developed after Aug. 10, 2005) and public transportation alternatives beyond those currently required by the Americans with Disabilities Act of 1990 (ADA) that assist individuals with disabilities with

transportation, including transportation to and from jobs and employment support services. Eligible recipients are those entities who agree to provide public transportation services designed to meet the NF guidelines, including state agencies, local governmental authorities, private nonprofit organizations, and operators of public transportation services.

Under this program federal funds may be used to reimburse up to 80% of eligible capital expenditures, though the federal funding level may increase to up to 90% for incremental costs related to compliance with the Clean Air Act or with the ADA. Administrative costs associated with the project as well as net operating expenses are eligible for a federal reimbursement rate of 50%.

i. State Grants Program

State funds appropriated by the Texas Legislature are available to small urban and non-urbanized (rural) systems for public transportation related projects. This grant program is administered using the same guidelines as the small urbanized and non-urbanized grant programs described above in Section VII.B.1.b and Section VII.B.1.e.

There are no matching funds ratios required in this program, except for systems (currently there are four) which have state statutory required matching ratios.

Policy and overall coordination for the various public transportation grant programs is provided by the headquarters based Public Transportation Division (PTN). Coordination with specific grantees and oversight of grants is provided by district-based public transportation coordinators. These public transit coordinator positions in each district may either be full-time positions or part-time positions with staff also having other duties depending on the size of the public transportation program in a specific district.

2. Traffic safety grants

The Traffic Safety Grants Program provides federal and state funding to state and local governments, educational institutions, and non-profits to develop and deploy traffic safety projects throughout the state. State agencies, such as the Department of State Health Services and the Department of Public Safety may also apply for grant funds for programs such as education programs promoting seat belt usage, free child car seats, operation of a consumer hotline, and Selective Traffic Enforcement Programs (STEP). Approximately 75% of the projects funded each year are locally focused projects, with the remaining projects statewide in scope.

A competitive selection process is conducted during the first six months of each calendar year. Grant proposals are evaluated and funded based on objectives in 14 program areas. Proposals must include local matching funding (which can entail local dollars, in-kind amounts, volunteer time, etc.) of 10% in the first year, with points

awarded for higher percentages, and must demonstrate a scheme for replacement of 50% of federal funds with local funds by the fifth year of the project.

Grant-funded projects are aligned with a six year strategic plan (which is updated every two to three years) and becomes part of the state's annual Highway Safety Performance Plan, which is submitted to the National Highway Traffic Safety Administration (NHTSA) and becomes the basis for managing safety programs throughout the year. This multi-year plan of action, based on the state's fiscal year, with funding distributed based on federal fiscal years, includes crash and other safety data, performance objectives, funding priorities and related percentages. The plan is organized into three areas of funding priority based on identified needs—Core Competencies (such as enforcement services) which receive approximately 75% of grant funds, Core Auxiliaries (such as records) which receive approximately 15% of grant funds, and Contiguous Competencies (such as emergency medical services and bike safety) which receive the remaining 10% of grant funds.

The Traffic Safety Grants program is administered by the Traffic Safety Section of the Traffic Operations Division. The Traffic Safety Section is currently deploying an 'eGrants' process involving implementation of a third-party software package called Intelli-Grants. This off-the-shelf software application is scheduled for implementation over the next year. This system is intended to streamline the grant process by using an Internet-based (through Texas Online) proposal submission process, project performance/management reporting and a tracking process to avoid duplication of effort/data entry, and provide a readily accessible, seamless, and relatively paperless grant process from beginning to end. While initially implemented specifically to meet the needs of the Traffic Safety grants program, consideration has been given to the potential adaptability of this software application to other grants program and representatives of the other grants programs have been included in some project activities in an advisory capacity.

While the Traffic Safety Section has responsibility for policy setting and managing the grantee selection process, responsibility for managing and providing oversight of the individual local grants is vested in staff in each district. Twenty-one FTE district traffic safety specialists are stationed throughout the state's 25 district offices (two FTEs in metro areas, one FTE in urban areas, and 0.5 FTE in rural areas) to manage safety programs, assist prospective and funded grantees, and perform contracts management of local grants.

The program's customers and stakeholders include NHTSA, selected state and local prospective and funded grantees, and other state and local partners involved in traffic safety such as Mothers Against Drunk Driving (MADD), the Texas Chapter of the National Safety Council and the American Automobile Association (AAA) among others.

The main objectives for the Traffic Safety Grants program are to encourage traffic safety behaviors and reduce death and injuries on Texas' roads and highways. The

Highway Safety Performance Plan includes a wide range of specific safety objectives, priorities, and performance indicators.

Texas' education and enforcement programs have been successful in achieving a 90% safety belt utilization rate, which compares very favorably with the national average of 82%. A recent management review by NHTSA in March of 2006 also resulted in a number of favorable recommendations for TxDOT's Traffic Safety Grants program, with only a small number of suggested areas for improvement identified.

One of the areas for improvement noted in the NHTSA study was the need for more timely access to crash reporting data. Currently, because of the absence of up to date highway crash data as a result of delays in implementing a new crash reporting system, it is difficult to assess the overall impact of the Traffic Safety Grants program on highway safety. However, data from the federal Fatality Analysis Reporting System (FARS) does ostensibly show a decline in alcohol-related fatalities; and the Department of State Health Services' death records and Trauma Registry show reduced injury and death rates for children from automobile crashes.

In addition to managing the Traffic Safety Grants programs, the Traffic Safety Section also participates in statewide safety education and enforcement efforts, such as the 'Click-It or Ticket' campaign and impaired driver programs. Likewise, as part of the administration of the Traffic Safety Grants program and development of the related Highway Safety Performance Plan, the Traffic Safety Section works with the Texas Department of Public Safety (DPS) to receive, analyze, and manage state crash data. The Traffic Safety Section also provides funding to vendors, on a competitive basis, for advertising campaigns.

In terms of safety education programs, stakeholders include state agencies, local and statewide interest groups, and the Texas Transportation Institute, which provides the Traffic Safety Section with survey data, analyses, planning, and training assistance.

The Traffic Safety Section appears to have strong support from the Texas Transportation Commission and TxDOT senior management. Based on the recent NHTSA management review and past recognition received nationally, many of the program's policies and activities are apparently considered best practices by NHTSA and other national organizations.

3. Automobile theft prevention grants

The Automobile Theft Prevention Grants Program manages activities designed to reduce vehicle theft in Texas. This includes the provision of grant funds to local and statewide law enforcement projects/programs and the maintenance of a statewide network of law enforcement entities, local prosecutors, insurance industry representatives, and residents to combat vehicle theft through special direct initiatives and public education and media efforts. The Automobile Theft Prevention Program also maintains a partnership with the Mexican government to reduce cross-border

activities. Auto theft is part of a complex mix of professional criminal activities involving insurance and title fraud, identity theft, and drug trafficking. The cost of auto theft to vehicle owners and insurance carriers exceeds $700 million annually.

The Automobile Theft Prevention Program is managed by the independent Automobile Theft Prevention Authority (ATPA), which is administratively housed within TxDOT's Vehicle Title and Registration (VTR) Division. ATPA staff are TxDOT employees, though the ATPA Director has a dual reporting relationship to the ATPA board, which reports directly to the Governor, for policy issues and to TxDOT's management for administrative issues.

Grant funds are secured from a $1 surcharge on automobile insurance policies sold in Texas and are provided through a formal solicitation, submission, and scoring/awarding process which involves mandatory workshops and administrative guidelines designed to ensure consistency in addressing identified needs and proposal submissions. Grant proposals are evaluated based on their impact on the statewide auto theft rate and other related performance indicators (such as the number of prosecution referrals and convictions, and clearance rates) and program evaluation designs. Expenditure and progress reports are submitted and reviewed quarterly.

In 2006, ATPA awarded approximately $12 million in grant funds to 32 programs/projects. Over 200 law enforcement positions are funded in Texas through ATPA monies. First and second year funds are provided at the rate of 100%, while third year and thereafter funds are capped at 80%, which requires grantees to provide a commensurate 20% cash match.

Customers/stakeholders include grantees and others involved/interested in auto theft, including, cities, counties, other local units of government, state agencies (such as the Department of Public Safety and Texas Department of Criminal Justice), private sector entities, and the public.

The ATPA program has made progress in reducing auto theft activity and related costs and recovering stolen vehicles. Auto theft rates (i.e. thefts per 100,000 registered vehicles) and the total number of thefts have declined dramatically (nearly 60%) since the program's inception in 1991, and have leveled off in recent years. Vehicle recoveries have also increased ten fold since the start of the program.

4. Transportation Enhancement Program

The Transportation Enhancement Program is provided for under the federal SAFETEA-LU transportation legislation. The program includes transportation-related activities that contribute to the livelihood of communities, promote the quality of the environment and enhance the aesthetics of Texas roadways. The goal of the program is to encourage diverse modes of travel, increase the community benefits to transportation investment, strengthen partnerships between state and local governments and promote citizen involvement in transportation decisions.

The Transportation Enhancement Program is a statewide competitive program and is administered in accordance with applicable federal and state rules and regulations. The funds provided by this program are on a cost reimbursement basis and thus technically not considered a grant. Projects undertaken with enhancement funds are eligible for reimbursement of up to 80% of allowable costs. The governmental entity nominating a project is responsible for the remaining cost share, including all cost overruns.

To be eligible for consideration, all projects must demonstrate a relationship to the surface transportation system through either function or impact; provide a function beyond standard transportation activities; and incorporate one of 12 eligible categories. Examples of the range of projects recently funded under this program include:

- Preservation and rehabilitation of the Waco Suspension Bridge and Trail.
- Rehabilitation of the historic Santa Fe Railroad Depot and Grounds in Temple.
- Renovation of the Canadian River Wagon Bridge in Canadian.
- Construction of a storm water sedimentation and pollution mitigation basin adjacent to a roadway in Paris.
- Adding landscaping and walkways to a block-long median along State Highway 19 in Athens.

The Transportation Enhancement Program is administered by TxDOT's Design Division, with operational support for management of the program and oversight of individual projects provided by staff in each of TxDOT's 25 districts. The last call for projects for this program was held in early 2006; however, the program call was suspended until issues involving federal rescissions of transportation funds can be resolved.. The last year for which there was a completed call and award cycle was Fiscal Year 2001.

Transportation Enhancements was included in this study area at the request of the Audit Oversight Committee because, while its funding process is somewhat different from the other grant programs reviewed, it nonetheless includes the major components of a traditional grant program (e.g. a call for proposals or RFP process; proposal submissions; proposal review/scoring; awards; reimbursement and performance reporting; and project monitoring).

C. Risk Identification and Assessment

Exhibit VII-2 provides a summary of the key risks identified during the initial risk assessment which were included in this study area for additional analysis. Each risk is then described in further detail below.

Exhibit VII-2: Summary of Risks Identified in Grant Programs

Risk ID	Functional Area	Description	Risk Ranking (High, Medium, Low)	Potential Impact
GR1	Grants Management	Limited grants or contracts management experience and/or training for district staff responsible for administering the various grant programs	High	• Loss of synergies in cases where multiple staff in a district are performing contracts management roles on a part-time basis • Potential for inconsistent interpretation of program rules and policies as a result of lack of experience of staff
MP3	Multi-Program	Dependence on technology to implement critical business change	High	• Delays in achieving service improvements and/or cost savings

The major risk specifically identified in this study area centers around the capacity of district office staff to professionally manage and monitor the grants awarded to entities in their respective areas. Interviews with stakeholders and agency staff indicate that TxDOT employees at the headquarters and district office levels strive for effective grants management through the use of manuals, training, and oversight activities; however, the process for hiring and assigning district office staff is highly decentralized, selection criteria for those staff assignments is not always consistently applied because of variations in the number and nature of projects within district offices and the availability of qualified staff to manage them and other local factors, and there are gaps in training.

The other identified risk (i.e. dependence on technology) incorporated in this study area for additional analysis was identified in the multi-program section of the initial risk assessment. It applies to this study area to the extent that some business process improvements in the area of grants management may be dependent at least in part on the deployment of enhanced technology. Specifically, this risk was included in this study area to assess the

feasibility of deploying the Traffic Safety Section's eGrants application for other grants programs.

D. Audit Analysis Approach

To further study and analyze the risks included in this study area, a technical working-group of stakeholders was established to provide guidance and input to the audit team. This stakeholder group consisted of TxDOT management and staff responsible for managing the elements of the study area as well as representative external stakeholders. Those participants serving as members of the Grants Management stakeholder group included:

- Terry Pence, Director, Traffic Safety Section.
- Michael Weaver, Policies and Procedures Coordinator, Traffic Safety Section.
- Jacque Magill, Traffic Safety Specialist, Austin District Office.
- Irene Webster, Traffic Safety Specialist, Atlanta District Office.
- Ismael Soto, Director of Transportation Operations, Corpus Christi District Office.
- Major Luis Gonzalez, Texas Highway Patrol, Department of Public Safety.
- Cheryl Mazur, Director, Program Management Section, Public Transportation Division.
- Gary Williams, Program Manager, Public Transportation Division.
- Dale Spitz, Public Transportation Coordinator Supervisor, Tyler District.
- Darla Walton, Public Transportation Coordinator, Bryan District.
- Mary Hobson, Public Transportation Coordinator, Ft. Worth District.
- Rob Stephens, Concho Valley Council of Governments.
- Susan Sampson, Director, Auto Theft Prevention Authority.
- Charles Caldwell, Grant Administrator, Auto Theft Prevention Authority.
- Janet Rodgers, Tarrant County Auto Theft Task Force.
- Mark Marek, Design Division Director.
- Janice Mullinex, Director, Contract Services Section, Office of the General Counsel.

Our audit analysis approach, which was executed in conjunction with this stakeholder group, consisted of the following work steps:

1. Performing a detailed analysis of the current environment through follow-up interviews of TxDOT staff (headquarters and districts) and stakeholders of the various grants programs and through a review of manuals, guides, reports, and other documents and follow-up data requests.

2. Conducting a review of best practices and lessons learned from other peer states, the federal government, and other entities.
3. Identifying various alternatives for further analysis and evaluation, preparing a detailed analysis of each of these alternatives and conducting a detailed walkthrough of this alternatives analysis and other findings with the stakeholder team. As part of this analysis effort, the audit evaluated the following models or strategies:
   - A status quo model which analyzed current operations.
   - A technology model which assessed opportunities for applying additional automation including deployment of the Traffic Safety eGrants initiative to other grants program.
   - A workforce model, which evaluated grants management skills and competencies which should be required and assessed alternative staff approaches such as regionalization of current part-time program specialists across several districts to create a full-time role and the sharing of grants managers across programs in a given district.
   - A self certification model which analyzed the feasibility of shifting some compliance monitoring and reporting responsibilities to grantees themselves.
4. Documenting our specific recommendations in this report chapter and developing a transition strategy for implementing the various recommendations.

Work in this study area involved conducting detailed interviews with TxDOT staff, federal partners, and other external stakeholders. Exhibit VII-3 summarizes these interviews by role and function.

Exhibit VII-3: TxDOT Interviews Conducted

Name	Role	Function
Rob Stephens	Concho Valley Council of Government	Interview: External Stakeholder Group Member
Mark Marek Barrie Cogburn	Design Division Director Landscape Architect and Program Staff	Interviews: Agency Stakeholder Group Member, Data Request Follow-ups
Gail Lyssy Linda Kemp	Director, Office of Program Management and Oversight, Federal Transit Administration Grant Manager	Interview: External Stakeholder
Cheryl Mazur	Director of Program Management, Public Transportation Division	Interview: Agency Stakeholder Group Member, Data Request Follow-up
Various	Traffic Safety Section, Traffic Operations	Site Visit/Meeting: eGrants Stakeholder Demonstration

Name	Role	Function
Michael Leary Clarence Rumancik	Director of Planning and Program Development, National Highway Traffic Safety Administration Grant Manager	Interview: External Stakeholder
Ken Copeland	Regional Program Manager for Texas, South Central Region, National Highway Traffic Safety Administration	Interview: External Stakeholder
Meredith Garcia	Texas State Auditors Office	Interview/Contact: Training Resources
Bob Nichols and Joyce Sparks	Director, Governor's Center for Management Development	Interview/Contact: Training Resources
Allison Supancic	Hogg Foundation, University of Texas at Austin	Interview/Contact: Training Resources
Denise Francis and Demetri Fairley	Director, State Grants Team, Governor's Office of Budget and Planning	Interview/Contact: Training Resources and Uniform Grants Management Standards

E. Best Practices Survey of Other Organizations

As part of our analysis effort, Dye Management Group, Inc. conducted a survey of other Texas state agencies; agencies in other states that were either similar in size to TxDOT or had technology initiatives that were adaptable to TxDOT's grants management activities; federal agencies; and various professional organizations to determine the service delivery approaches utilized for grants management functions. The goal of this survey effort was to better understand the success of different approaches in peer states and in other organizations around the country and to identify and document best practices and lessons learned and assess their applicability to TxDOT. This task was performed through a review of available business literature, web sites, and other sources, with follow-up telephone interviews conducted with some organizations as required.

Based on the research conducted by the study team, a number of best management practices were identified. These include:

- Increased emphasis on training and certification programs.
- Implementation of electronic grants application and integrated grants management systems.
- Wider use of sub-recipient monitoring.
- Increased sophistication in the development and use of performance measures.

Each of these elements is discussed in further detail below.

1. Increased emphasis on training and certification programs

There is an increased emphasis on training and professional certification in grants management. This includes defining the skills and competencies required for a variety of different kinds of positions. Several examples of this focus on training and certification programs are highlighted below.

a. National Grants Management Association Certified Grants Management Specialist (CGMS) ™

The National Grant Management Association (NCGMA) has begun development of a 'Grants Management Body of Knowledge' leading to designation as a Certified Grants Management Specialist (CGMS) ™. The CGMS ™ designation will serve as recognition that an individual has:

- Demonstrated the appropriate level of education and professional experience related to grants management.
- Passed a rigorous examination based on a comprehensive set of Grants Management Body of Knowledge Standards.
- Agreed to abide by a professional code of conduct.
- Maintains professional certification by adhering to a set of continuing education requirements[8].

NCGMA is targeting to develop the Grants Management Body of Knowledge during 2007, with beta testing of the credentialing examination accomplished in 2008 and the first candidates allowed to sit for the credentialing examination in 2009.

b. Federal agency training programs

Federal agencies such as the Environmental Protection Agency (EPA) and the U.S. Department of Housing and Urban Development (HUD) have been particularly active and innovative in grant management training efforts in the following areas, which correspond to the generally accepted basic knowledge, skills, and abilities for grants management:

- Grant administrative functions.
- Grantee capacity and proposal assessment.
- Development of meaningful goals/objectives/performance measures.
- Report writing and communications.
- Desk/report monitoring and site monitoring activities.

[8] National Grants Management Association; http://www.ngma.org/id21.html

- Financial and legal compliance and project progress assessment/analysis/evaluation.

c. Training programs available from Texas state agencies

Three Texas state agencies have or are currently offering some form of grants management training. These include:

- State Building and Procurement Commission which offers multi-part courses in contract administration and grant management.
- State Grants Team in the Texas Governor's Office which may develop/deliver a customized training course.
- Texas State Auditor's Office which has offered grant management courses in the past.

d. Training programs in other states

Some other states have taken holistic and innovative approaches to grants management training, such as the:

- State of Maryland, which uses a team approach to training.
- State of Ohio, which sponsors/conducts statewide grants management workgroup meetings, manuals, and training courses.

e. Other grants management training programs

There are numerous organizations offering training courses, that are reasonably priced one to four day courses, delivered on-site and//or via tele/audio-conferencing, for training and/or certifying grant staff such as grant administrators and grant specialists. These training offerings include the following:

- Clemson University.
- Research Associates, through the University of South Carolina, and other private vendors.

2. Implementation of electronic grants application and integrated grants management systems

Electronic grants submission, reporting, and management systems are gaining acceptance and broader use nationally. Notable examples include:

- National Science Foundation.
- U.S. Department of Transportation, Federal Transit Administration.
- U.S. Department of Education, Office of Post-Secondary Education.

- State of Maryland, Governor's Office of Crime Control and Prevention.
- Texas Education Agency.

3. Wider use of sub-recipient monitoring

The study team identified increased utilization of sub-recipient monitoring by a number of federal and state agencies. This sub-recipient monitoring is one potential type of self-certification as envisioned within the scope of this study area. Examples include:

- The U.S. Department of Housing and Urban Development uses self-monitoring techniques such as training grantees in grant monitoring, including risk-based monitoring, and self-evaluations.
- The State of Tennessee has developed an accounting and financial reporting manual for this purpose.
- The Commonwealth of Puerto Rico has developed property management and public funding materials and guides.
- The State of Maryland has developed a set of standards and taken a coordinated approach to monitoring sub-recipients.

4. Increased sophistication in the development and use of performance measures

There is increased sophistication in the development and use of performance measurement, which includes such techniques as logic chains to link strategies to results; the development of improved outcome measures; better tie-ins between program goals/outcomes and federal and state agency goals; and improved monitoring and evaluation techniques. Examples of the development and application of performance measures include the following:

- National Grants Partnership which has created 'Uniform Data Elements.'
- U.S. Department of Housing and Urban Development which makes extensive use of outcome measures and self-evaluations in its monitoring activities.
- U.S. Department of Transportation, Motor Carrier Safety Administration which requires outcome and efficiency measures and project tie-ins to agency goals as part of its grants application process.
- U.S. Environmental Protection Agency, U.S. Department of Housing and Urban Development, U.S. Department of Health and Human Services, and United Way which all require grantees to use logic chains to develop, explain, and justify program outcomes and linkage to funded strategies/projects.

F. Key Findings

Based on our review of operational statistics, our best practices survey of other organizations, discussions with TxDOT staff and stakeholders, our review of various alternatives, and our review of manuals, reports, training offerings, etc., this section summarizes our key findings in regards to TxDOT's grants management functions. These key findings include the following:

1. Grant programs operate autonomously within each TxDOT division and are therefore missing opportunities to share best practices, address issues of common interest, and ensure consistency

While each program reported following the requirements of the State of Texas' Uniform Grant Management Standards, each program area implements these standards within their specific function through different policies, processes, and procedures. While there is some centralized contracting support through the Office of General Counsel's Contract Services Section (i.e. for creating contract forms and offering contract training, etc.) and voucher processing support through the Finance Division, there is no overall management or operational mechanism for ensuring agency-wide consistency on key program aspects, especially workforce policies and performance management.

The various TxDOT divisions responsible for managing grants or grant-like programs do not generally collaborate on best practices and process improvements. Though each grant program serves generally different purposes and customers, the basic grants management functions have inherent areas of common interest.

2. There is inconsistency in the use of position descriptions for assigning district office staff responsible for grant programs which can result in staff not fully understanding or being qualified to perform grant management oversight functions

Headquarter and district office staff provide training and technical assistance to grantees, and monitors grant activity. While the agency has developed generic position descriptions (e.g. Transportation Funding Specialist/Planner) to guide the hiring, assignment, and appraisal of staff within the agency, these positions descriptions are used more uniformly in headquarters operations than they are at the district office level. District office staff assignments are determined by district engineers, with varying configurations, job descriptions, skill levels, and selection criteria which may or may not conform to the agency's generic descriptions.

Many district office staff perform a variety of functions as coordinators and specialists, some of which are more related than others. For example, in some districts, an office manager may be assigned the responsibility of coordinating grants.

In some districts, grant activity may only warrant a staff person devoting part-time efforts to the task while in larger districts, there may be one or more positions devoted to this responsibility. While this variability serves an important purpose in flexibly meeting local needs given the availability of local labor pools, it does pose some risk to the agency. Exhibit VII-4 shows HQ and DO staff assigned to grant management functions. This information is based on data provided to the study team by TxDOT Finance and the various grants programs.

Exhibit VII-4: TxDOT Grant Programs Staffing Levels

Grant Program (Division)	Number of HQ Staff FTEs Assigned (FY 2006)	Number of DO Staff FTEs Assigned (FY 2006)
Public Transportation Grants (Public Transportation Division)	14.3****	21.2
Traffic Safety Grants (Traffic Operations Division)	14	33
Auto Theft Prevention Grants (Vehicle Title and Registration Division)	2	12*
Transportation Enhancement Program (Design Division)	6**	6.25***

* ATPA grants are wholly state-funded and managed centrally from Austin with no formal district office role or assigned staff.

** Staff FTEs involved in the evaluation and plan processing stages.

*** Estimate based on an average of 0.25 FTE per district. All districts have projects underway or pending letting so every district should have a person assigned as an enhancement coordinator, even though this would likely only be a portion of an FTE.

****Estimated based on Finance Division report, however Public Transportation staff has indicated the full-time equivalency of positions is somewhat less.

3. TxDOT has made improvements in the training of staff but could do more to improve the productivity and effectiveness of its staff, particularly in district offices

All programs offer training for staff, though each program's training regime for district office coordinators varies. Programs have provided and continue to provide high quality training for staff in the district offices. For example, Public Transportation has begun a periodic training program for new staff using headquarters and peer trainers from all of the districts to provide and receive training of new employees. The Public Transportation Coordinator Networking Workshop uses a peer-

to-peer, team approach which is considered a best practice in use in states like Ohio and Maryland. Through this process, public transportation coordinators often work with a peer to gain on-the-job experience. This is in addition to quarterly video conferences and its biannual business meetings for public transportation coordinators and transportation agencies.

In Traffic Safety, there is a 2.5 day Project Management Class for new employees, though there is no ongoing/in-service training for employees (with the exception of training provided for the new eGrants system). Existing traffic safety staff are encouraged to attend the Project Management Course training once every 3 years after they have initially gone through the course. In addition, Traffic Safety Specialists are also encouraged to work with a peer to gain on-the-job-experience where possible.

Both ATPA and Transportation Enhancements provide training (sometimes through OGC such as contract administration) to their employees, district personnel, and/or grantees/sponsors Despite these offerings, there are indications that training is not always available or timely delivered, focused on grant management, or supported with up-to-date manuals.

Some TxDOT headquarters and district office staff have professional certifications or varying kinds in their area of program expertise but very few have grant management certifications per se. There is a growing body of knowledge surrounding the skills and abilities required for grants management and a growing awareness of the importance of training for and certification in those skills.

4. TxDOT's grants programs make limited use of performance measures and generally do not effectively link these performance measures where they are measured into the grant selection process

Programs have strategic and operational plans but they do not always guide the grant process. All programs have performance measures but they do not necessarily include outcome measures specifically tied to strategies (through a logic chain) or agency or federal goals, although Traffic Safety does utilize a mechanism to align agency goals and objectives with project-level performance.

The programs do not have common performance metrics for similar functions and measures that do exist are not always aggregated at the state level for management and accountability purposes.

The following performance measures are not currently available in or reported by any of the program areas (except for Auto Theft Prevention which does collect the data):

- Process Measures such as:
  - Percentage of grantees or district offices audited, reviewed, or inspected annually or recently.

- Outcome Measures such as:
  - Percentage of grantees with no recent audit, review, or inspection exceptions or late performance reports.
  - Percentage of grant agreement performance goals/objectives achieved.
  - Percentage of funded projects that are on time and on budget.

Though both Public Transportation and Traffic Safety have annual and/or quarterly requirements for the number of site visits of local grantees/sub-grantees, they do not collect that information for agency-level reporting. This and other data is available through a paper file review but is not regularly reported, though this situation will be rectified in Traffic Safety as a result of its eGrants system/process as will its ability to report the three outcome measures identified above.

5. With the exception of Traffic Safety, TxDOT grant programs are not making full use of effective practices involving electronic grants management tools

Automated/electronic systems which support the full grants management lifecycle are growing in prevalence around the nation. The Federal Transit Administration (FTA), for example, uses an electronic grants management system to provide funding to the State of Texas. While TxDOT's other grant programs make partial use of automation to support certain program functions, only Traffic Safety has implemented a fully automated grants management application.

6. Traffic Safety's eGrants initiative is expected to provide improvement to the efficiency and effectiveness of the grants management process for both TxDOT and grantees

The Traffic Safety grants program has recently deployed and is completing the first year rollout of a new eGrants system/process that will support the entire grants management lifecycle. This involves electronic support and automation of the solicitation/call for proposals, submission, review/scoring, awarding/contracting, and reimbursement, performance reporting, and monitoring of grants.

Preliminary results of Traffic Safety's eGrants implementation effort indicate that this new system/process will provide significant benefits for TxDOT and grantees, including:

- Improved access to grant programs by grantees and prospective grantees (e.g. Traffic Safety has experienced a 20% increase in the number of grant applications in the first year of its eGrants system/process, including a number of first time applicants).

- Reduced paperwork, mailing, and document storage/retrieval costs and delays.
- Reduced errors.
- Improved reporting and monitoring capabilities (many of the performance metrics that are currently not available, as noted in Section VII.F.2 of this report will be available through eGrants starting in 2008).

While there is capital, operating, and training costs associated with procuring/developing and deploying eGrants in the short run, these costs are outweighed by the system's long-term benefits and cost savings. The system provides features which allow official documents and project performance documentation to be submitted with applications and performance reports.

The system also provides mechanisms to ensure confidentiality of and limited access to sensitive law enforcement and other non-public information which is a particularly critical feature of grants projects in the auto theft prevention arena.

7. Traffic Safety and Public Transportation Grant Programs have been experiencing growth (in terms of dollar amount of grants and number of projects/grantees managed) relative to staffing levels and operating budgets

As a result of this mismatch between program workload, staffing levels and professional capacity, there is the potential for increased financial and legal risk over time due to the inability to adequately monitor projects and grantees, notwithstanding the programs' generally rigorous monitoring regime. The condition suggests the agency needs additional strategies to improve workforce capacity and target monitoring resources to areas of greatest risk.

In addition to the recent training improvements mentioned above, grant programs have sought to establish risk-based monitoring programs. In Public Transportation, district office coordinators are required to visit each grantee at least once per quarter. In Traffic Safety, all sub-grantees are supposed to receive an on-site visit at least once a year. Likewise, Public Transportation and Traffic Safety headquarters staff conduct site visits of district office staff and one or more grantees approximately once every five years.

8. Transportation enhancement projects have very lengthy project lifecycles, which complicates the administration and oversight of these projects and management of the overall program

A noteworthy ancillary finding of this review has to do with the start and completion dates of Transportation Enhancement projects. Many of these projects are slow to commence and conclude, some of which are over ten years old. While there may be good reason for such delays (e.g. complex construction projects requiring right of way

and other property acquisitions, coordination with other projects, etc), these legacy projects reduce the effectiveness and timeliness of the program and tie up scarce public funds that could be used for other projects that are ready to begin. The Federal Highway Administration has indicated that it is within the Texas Transportation Commission's purview and authority to set reasonable boundaries for such projects.

G. Recommendations

This section presents our recommendations for improving the overall efficiency and effectiveness of TxDOT's grants management activities. These recommendations were developed based upon evaluation criteria established during the Risk Assessment phase of the audit. Each recommendation was appraised against a set of criteria that indicated its impact to the TxDOT's mission, scope, and function as well as the impact to its customers and partners.

Exhibit VII-5 summarizes our proposed recommendations and presents our suggested timing for implementing the proposed recommendations. Each of these recommendations is then discussed in further detail below. Overall, most of the recommendations can be implemented within the next 12 months, although eGrants and self-certification strategies will take longer as noted below.

Exhibit VII-5: Grants Management Recommendations Timeline Chart

Recommendation	Within 12 months	Within 24 months
The audit team recommends that TxDOT maintain its current district-based structure for managing the oversight of public transportation and traffic safety grants and the enhancement program	✓	
The audit team recommends that TxDOT create a 'Grants Management Coordination Team' to standardize and coordinate grant management processes across program areas	✓	
The audit team recommends that TxDOT establish a set of common grants management processes and associated outcome measures for implementation across program areas	✓	

Recommendation	Within 12 months	Within 24 months
The audit team recommends that TxDOT implement the eGrants systems and processes for the public transportation and auto theft prevention grants programs		✓
The audit team recommends that the Department establish standard 'grants management' position criteria for use in selecting and assigning district office staff	✓	
The audit team recommends that the Department continue to make improvements to its training efforts, especially of district office staff	✓	
The audit team recommends that TxDOT work towards obtaining grants management certifications for their grants management staff as the National Grants Management Association Body of Knowledge matures		✓
The audit team recommends that the department utilize self-certification techniques in selective low risk areas to build grantee management capacity and to allow agency staff to focus monitoring efforts in high risk areas		✓
The audit team recommends that the TxDOT work with recipients to establish reasonable start and completion timeframes for projects as part of the contract agreement process	✓	

1. **The audit team recommends that TxDOT maintain its current district-based structure for managing the oversight of public transportation and traffic safety grants and the enhancement program**

   After examining the grants management activities performed by the districts in support of the public transportation and traffic safety grant programs and the project oversight

of enhancement projects, the audit team recommends that TxDOT maintain its current district-based structure in which the allocation and assignment of positions responsible for managing these programs are staffed at the discretion of the district engineer within the overall structure of the district.

As part of our analysis, the audit team evaluated the impact of the current part-time grants management assignments in some districts and evaluated whether it would be advantageous to either:

- Regionalize responsibilities for a particular grants program across multiple districts (as an example, one person coordinating public transportation across two or three districts); or
- Consolidate responsibilities for grants management across multiple grants programs within a district (i.e. one person managing both traffic safety and public transportation in a district) when the position requirements for two or more programs were less than full-time.

Regionalizing responsibilities for the public transportation, traffic safety and enhancement programs across multiple districts has a number of advantages. This includes better utilization and focus of staff on a specific program area; enhanced knowledge of staff because they are focused on one program and can develop specialization in that area; and the potential for improved productivity and grant management/monitoring capabilities because staff are focused on this one program area. In addition, there could be improved career opportunities for staff within their chosen program area statewide.

These advantages are offset, however, by several disadvantages. The first disadvantage is the loss of cross-program synergies if responsibilities for public transportation or traffic safety program are taken away from the district office, something that is inconsistent with the intended multi-modal scope of TxDOT and its district operations. A second disadvantage is that under a regional model it may be more difficult to effectively leverage the relationships that the district engineer and other senior-level district staff have developed with the local leadership of the various counties, cities and towns in the districts A third disadvantage is some loss of flexibility for district management in staff assignments including the ability to redirect staff to short-term priorities at the district office level.

Likewise, while consolidating the management of the public transit and traffic safety functions with one person may be appropriate on a case by case basis in some districts, the audit team did not feel that a consolidation of responsibilities where one FTE has responsibilities for two or more programs was generally beneficial. While the grants management skills needed is clearly similar across program areas, there is also a tremendous amount of specific program knowledge that is required and it was not believed that one individual would generally develop the requisite detailed level of program knowledge in more than one program area.

2. The audit team recommends that TxDOT create a 'Grants Management Coordination Team' to standardize and coordinate grant management processes across program areas

This Grants Management Coordination team should be formally chartered with a stated business case, goals, stakeholders and timelines/milestones. There should be executive sponsorship consisting of a senior TxDOT management member, with annual rotating administration among program areas in all four divisions. Membership on the team should include key headquarters management and staff from each grant program area and representatives from district offices, Finance Division, and Office of General Counsel. The team charge should include:

- Facilitating the sharing of grants management best practices.
- Designing, deploying, and supporting the deployment of the eGrants application to the other grants programs.
- Facilitating other ongoing technology and business process solutions.
- Developing and deploying common position descriptions, skill requirements, and career pathways for headquarters and district office staff.
- Developing and deploying training and certification criteria, requirements, and plans. These should be tied to the position skills requirements developed by the team and updated on a go forward basis as necessary.
- Developing common grants administration/management process and outcome performance measures and strategies for using these measures (please refer to Section VII.G.3 below)
- Identifying ongoing opportunities for further grantee self-certification (please refer to Section VII.G.8 below).
- Documenting cost savings/avoidance associated with recommended (and future identified) improvement strategies.
- Constituting ad hoc working groups/subcommittees as needed to address these and other charges. These groups can include a broader array of district office management and staff personnel as well as key stakeholder groups and representatives.

3. The audit team recommends that TxDOT establish a set of common grants management processes and associated outcome measures for implementation across program areas

It is recommended that TxDOT design a set of common grants management standards and processes to be implemented on a cross program basis. TxDOT should then develop a set of outcome measures associated with these standards and processes and

regularly publish these outcome measures. Example of outcome measures could include the following:

- Percentage of grantees or district offices audited, reviewed, or inspected annually or recently.
- Percentage of grantees with no recent audit, review, or inspection exceptions or late performance reports.
- Percentage of grant agreement performance goals/objectives achieved.
- Percentage of funded projects that are on time and on budget.

Likewise, it is recommended that TxDOT should develop strategies/protocols for using these measures for inclusion in grant agreements, grant management/oversight, internal program improvement, and external reporting.

4. The audit team recommends that TxDOT implement the eGrants systems and processes for the public transportation and auto theft prevention grants programs

Leveraging the success of eGrants for the Traffic Safety grants program, the audit team recommends that TxDOT utilize the Traffic Safety eGrants program as a template to design and deploy eGrants systems and processes for the public transportation and auto theft prevention grants programs. The systems design work training and implementation rollout of Traffic Safety's system/process should provide a very cost-effective basis for adoption/adaptation by PTN and the ATPA. Likewise, PTN already has experience with an eGrants system in working with FTA.

The eGrants system provides comprehensive information on all grant opportunities. The eGrants system also allows the agencies to use the information for strategic decision making and for agency specific reporting. eGrants will also decrease future agency development and maintenance costs, including costs for manual processing, data validation and error corrections.

The Transportation Enhancements program should not deploy an eGrants system as of yet because of the sporadic nature of its funding cycle. However, it should develop a contingency plan for utilizing eGrants if/when future solicitations and funding cycles begin again.

5. The audit team recommends that the Department establish standard 'grants management' position criteria for use in selecting and assigning district office staff

The audit team recommends that TxDOT direct the coordination team to utilize its existing standard position descriptions and customize them for the generic functions of

a ‘grant manager.’ Assigning a new employee to fulfill a grants management role can be challenging and time-consuming. The agency must select the best qualified individual. For specialized work, it is important to maximize the likelihood that the person selected will be able to perform the tasks. The grants management position serves as the liaison between grantees and program staff. This person’s task is to create and monitor reporting schedules, deadlines and requirements to ensure consistent grant processing. These qualifying position descriptions would then be communicated to district offices and monitored by headquarters personnel for consistency in application. These standard position criteria may not necessarily replace the formal title of a district office staff person, especially one performing other functions/job duties, but these position criteria should become a key ‘informal’ component of the job description and performance review of anyone performing such functions. TxDOT should also consider allowing headquarters program personnel to formally advise on hiring and assignment decisions of district office personnel to be assigned to a specific program area. This is already done somewhat formally now but should be done on a more consistent basis to ensure agency oversight of and consistency in the personnel decisions that affect the management of grant funds.

6. The audit team recommends that TxDOT continue to make improvements to its training efforts, especially for district office staff

TxDOT has made recent improvements to its training program for grants program staff. Dye Management Group, Inc. encourages TxDOT to continue its efforts in this regard. We believe the coordination team should develop a training plan for all headquarters and district office staff involved in grants administration and monitoring that includes a coherent sequence of courses involving: pre-service training, in-service/continuing training and education, and professional certification (either third-party and internally-developed/issued) of staff involved in grants management.

By the end of the training program, staff should be able to understand the rules of successful grant writing, understand the roles and responsibilities of TxDOT as the grantor, and the local entities as the grantee, understand the application of effective grants management and its importance to program execution, and obtain knowledge of available grant resources. The training should correspond to initial and ongoing skill requirements identified in the standard grant manager position and should utilize many of the approaches it currently employs such as teleconferencing to save time and travel expense and face to face meetings with headquarters staff and peers (and even recipients) as part of a team approach.

The audit team also recommends that TxDOT should work with state agencies, such as the Building and Procurement Commission, State Auditor, State Grants Team, and others to utilize locally produced/provided offerings.

7. The audit team recommends that TxDOT work towards obtaining grants management certifications for their grants management staff as the National Grants Management Association body of knowledge matures

The audit team recommends that TxDOT should actively support increased emphasis on training and professional certification in grants management activities. One approach for doing this would be to contribute to the development of the Certified Grants Management Specialist (CGMS) ™ program over the next two years by having one or two TxDOT staff actively participate as stakeholders in the development and beta testing of the certification program. Once the certification program is established, TxDOT should then require its staff performing grants management roles to achieve this certification within some period of time (potentially three years) after the designation becomes available. New staff assigned to grants management functions would then be required to achieve this designation within two years of being assigned to a grants management function.

This recommendation is intended to apply to all individuals performing grants manager functions within the department including grants selection, contract administration and grants or contract monitoring activities.

8. The audit team recommends that the department utilize self-certification techniques in selective low risk areas to build grantee management capacity and to allow agency staff to focus monitoring efforts in higher risk areas

TxDOT should develop strategies and protocols for grantees to certify grant performance and goal accomplishment, financial/legal compliance milestones, and operations in low risk areas, including certification of sub-grantee performance and use of private contractors to perform routine/administrative functions (such as inspections of inventories and equipment). Grant programs currently operate with a variety of self-certification mechanisms, including assurances and sign-offs. In addition, a high percentage of ATPA grants and a growing percentage of Transportation Enhancement grants are with cities or counties which provide another level of assurance or 'certification' through inclusion of funded projects in financial audits and through various forms of direct involvement. Some divisions within the U.S. Department of Transportation also use some forms of self-certification.

The proposed Grants Management Coordination Team and individual program areas should formally spell out the requirements for minimum self-certification standards and procedures and a process for TxDOT to periodically spot check/or sample grantee-certified findings.

The agency should take a very careful, incremental approach by focusing on a few initial areas as test cases. This would allow the agency to concentrate its resources in areas of higher risk of exposure to loss of funds or poor performance.

TxDOT should also consider developing an optional self-evaluation checklist for grantees and sub-grantees to use in assessing their operations and preparing for monitoring reviews. Grantees, which participate in this process and are effective in evaluating themselves, may receive some reduction in paperwork or other burdens. The self-evaluation may be made mandatory for first time recipients or recipients who demonstrate a history of non-compliance or other problems. It could also be used in conjunction with a peer review process.

Finally, while any major programmatic or process change requires review and concurrence by the cognizant federal partners, the area of self-certification definitely will require initial and ongoing consultation with each program's federal partners.

9. The audit team recommends that the TxDOT work with enhancement program recipients to establish reasonable start and completion timeframes for projects as part of the contract agreement process

The audit team's review of ongoing grants management activities revealed that within the Design Division's Transportation Enhancements Programs, some grant applications that were funded through TxDOT have not yet started. For example, there is one grant application that was awarded funds in 1991 and has not yet initiated grant activities. There were also some enhancement awards made in 2001 that have not yet been implemented. In each of these cases, funds that were provided through TxDOT have been held in escrow until the program that received the grant monies is initiated.

The audit team recommends that TxDOT work with the all grant recipients to develop a reasonable start date and completion date for each project approved for the awarding of available grant monies. This will help to ensure that these scarce funds are expended in a timely and mutually beneficial manner and are ultimately awarded to projects that have firm beginning and ending dates. If a grant applicant cannot proceed within the agreed to project dates, the funds that were awarded, should be withdrawn and re-awarded to applicants that can provide a reasonable completion timeframe.

This approach should be applied to any new enhancement award cycles. However, TxDOT should also work to apply this retroactively to the extent possible to existing enhancement projects, working with the recipients of all legacy projects to establish a set of milestone dates for initiating and completing the project. Where this proves to be difficult, TxDOT should consider on a case by case basis the rescinding of the enhancement award.

In conclusion, the recommendations for various grant management programs do not represent a significant operational change in the manner in which each individual program is conducted because, overall, there were no major operational problems identified. However, significant improvements can be made in the way programs organize and process information (e.g. grant application information, performance information, monitoring information, etc.) and identify, train, and utilize their workforces. These improvements can ensure consistent and professional use of best practices, policies, and processes, thereby producing cost savings, improved staff productivity, and reduced risk exposure over time.

The exact costs associated with these recommendations have not been determined since most could be implemented with existing staff resources. Deploying eGrants systems/processes in Public Transportation and Auto Theft Prevention will involve procurement, design, development, and implementation costs. However, these programs should benefit from Traffic Safety's experience and may be able to gain significant economies of scale (and reduced costs) by adapting many components of its system/process.

VIII. Study Area #7: Assessment of the Impact of Recent Operational Changes in the Medical Transportation Program and Identification of any Actions Required to Improve Coordination with HHSC and Prepare for Anticipated Program Growth

■

TxDOT's Medical Transportation Program (MTP) is responsible for providing transportation to Medicaid clients who have no other transportation available to access health care services, as well as participants in the Children with Special Health Care Needs (CSHCN) and Transportation for Indigent Cancer Patients (TICP) programs. During the initial risk assessment process, the audit team identified and documented two risks related to medical transportation. These risks were:

- The need for improved coordination and relationship with the Health and Human Services enterprise.
- The need to further assess the impact of various medical transportation operational initiatives on client service and overall program efficiency and effectiveness.

To address these risks in more detail, this study area involved an evaluation of the impact of recent operational changes in the Medical Transportation Program on client service levels and program cost effectiveness and efficiencies. The team built on the recent status review conducted by the Texas State Auditor. The team assessed the impact of these operational changes on client service delivery and program effectiveness by doing a high spot analysis of call center activity, claims processing and complaints, and by conducting some field interviews with transportation providers, health care and advocacy client representatives. The team also assessed steps required by TxDOT and the Health and Human Services Commission (HHSC) to facilitate improved communication and coordination between the agencies and define actions, which will be required by TxDOT to enable the agency to keep pace with the anticipated growth for client services.

Note: Since the study was commissioned, legislation has been passed transferring responsibility for the administration of the Medical Transportation Program from TxDOT to HHSC. Per SB10, the Medical Transportation Program will return to HHSC no later than September 1, 2008: The audit team believes, however, that most of our suggested recommendations are still applicable to the ongoing operations of MTP at HHSC and we would suggest that this audit report can be a valuable resource to HHSC in terms of planning for and executing the transition of the program.

A. Summary of Findings and Recommendations

The Dye Management Group, Inc. audit team conducted an in-depth review of the Medical Transportation Program at TxDOT. This involved interviews with TxDOT management and staff, as well as transportation providers and client representatives. The interviews were conducted to obtain a detailed overall interpretation of the facts and issues that were facing the program. Key findings are presented in detail in the following pages but are generally summarized as follows:

- The division of governance and operational responsibilities between the Health and Human Service Commission and the Texas MTP at TxDOT present both policy and operational coordination challenges for both organizations.
- Feedback from transportation providers and client representatives regarding TxDOT's performance in operating MTP are primarily positive.
- Improvements to and clarification of the contracting process from RFP issuance to post contract award for providers is needed.
- The procedures for creating the daily provider manifests and the information contained on the manifest are inconsistent.
- A number of call center performance challenges have been identified and are being addressed by TxDOT.
- There is no clearly understood comprehensive, objective system in place for recording and documenting the resolution of issues that arise with clients, providers and staff.
- A number of factors are likely to contribute to program growth and increased costs. This includes program forecasts conducted by HHSC which anticipate an increase in Medicaid caseload and an associated increase in MTP program expenditures; the impact of the federal government reimbursing Texas at the administrative rate rather than the higher FMAP rate and the impact of current litigation settlements as it relates to tighter program standards for all Medicaid recipients age 21 and under with the resulting operational impact for all recipients and increased use of the program as a result of outreach efforts required by the settlement.

A stakeholders group consisting of TxDOT staff, providers and client representatives was convened to review audit findings and to provide guidance and input to the audit team. The stakeholder group reached a consensus opinion that the findings gathered by the audit team accurately represented the functional processes, procedures and pertinent issues of the Medical Transportation Program. Recommendations were then developed by the audit team based upon the findings and analysis. These recommendations are presented in detail in the following pages but are generally summarized as follows:

- The state should consider revisiting SB10 provisions prohibiting TxDOT from acting as the MTP broker for the state during the next legislative session.

- A formal stakeholder/agency working group is needed to improve communication and coordination between TxDOT and HHSC.
- TxDOT should adjust program operations to address the various operational issues, some of which were identified in the interviews and stakeholder meetings.
- TxDOT should establish a process for evaluating current policies (i.e. the maximum 90-second hold time before a client is able to talk to an intake worker) on the quality of call center services.
- Protocols need to be developed for the appropriate escalation of call center calls to handle exceptions; likewise, call center staff need more training and tools to provide consistency in the information given to clients.
- TxDOT should educate providers regarding their formal and automated issue resolution process that tracks all issues consistently until resolved.
- TxDOT, in conjunction with HHSC, should use this audit as an opportunity to clarify policy issues pending or on hold that could improve operational efficiency and processes.
- Working with HHSC, TxDOT should assist in resolving the federal reimbursement disallowance issue using options available under federal waiver or through the Deficit Reduction Act (DRA) so that the maximum federal reimbursement can be reinstated.
- TxDOT should work with HHSC as they develop more realistic funding projections that take into account the cost drivers indicated in the study findings contained in this report.
- TxDOT should continue evaluation of different service delivery models and reimbursement models that could possibly be implemented for various geographic locations. As part of this evaluation, TxDOT should implement a pilot of a capitated broker model in at least one large, urban county[9].
- TxDOT should consider opportunities for implementing readily available and affordable technology, including potentially the application of various technologies as part of the recommended pilot. MTP staff has proposed the use of some of these technologies in the past and have encountered some Medicaid policy or statutory limitations. As an example, MTP has been advised that they must get a client's actual signature on a log book versus using a swipe card. Thus, it may be necessary to work with HHSC, the federal Centers for Medicare, Medicaid Services (CMS), and/or the Texas Legislature in some cases to adjust policies and/or statutes to facilitate greater use of these technologies. Use of these technologies can provide a significant return on investment in terms of improving the overall efficiency and effectiveness of the operation of MTP.

[9] A project to evaluate the service delivery models has been developed by TXDOT's Research Technology Implementation Office. Proposals submissions for "Evaluation of Models for Providing Medical Transportation Services in Texas" were due to TXDOT May 18, 2007 but due to recently passed legislation (SB 10), this project is now on hold.

The remainder of this chapter describes our analysis of this study area in more detail. It includes an overview of the Medical Transportation Program, a review of the risks included in the study area for further analysis, and a discussion of the audit analysis approach for this study area. It also includes a review of best management and business process practices and a summary of program activities by other peer states, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

The Texas Medical Transportation Program provides transportation services to clients that are deemed eligible under Medicaid and have no other transportation available to access medical services. The Texas MTP also provides transportation services to participants in the CSHCN and TICP programs. Funding for MTP programs, including participants in the CSHCN program, TICP program, state administrative costs and inter-agency contracts with HHSC and TWC during fiscal year 2006 totaled $106 million (from all funding sources).

Texas MTP focuses on providing non-emergency transportation services to eligible clients through three call centers where clients call toll-free to schedule rides. During fiscal year 2006, MTP scheduled and provided approximately 3.5 million one-way trips. The MTP focuses its efforts on providing cost effective transportation to eligible clients and works to ensure that clients have access to "reasonably close health care providers."

MTP is administered by the Transportation Services Section of the Public Transportation Division. This program was transitioned to TxDOT from the Health Human and Services Commission on March 1, 2004, as mandated by HB2292, 78th Legislature, Regular Session. As such, MTP is working through a number of challenges related to being on the cutting edge in terms of administering the delivery of medical transportation services to Texas citizens. For example, while TxDOT has operational responsibility for delivering the Medical Transportation Program, TxDOT does not have policy development responsibilities for this program. Those responsibilities still reside with the Health and Human Services Commission. As a result, TxDOT has limited authority regarding policy decisions that may have significant operational implications for the department.

Since the consumer services performance audit was initiated, legislation has been passed affecting the administration of the MTP at TxDOT. SB10, adopted during this legislative session transfers responsibility for the program back to HHSC. Per SB10, the following language is due to become law on September 1, 2007:

SECTION 3. (a) Subchapter B, Chapter 531, Government Code, is amended by adding Section 531.02414 to read as follows:

Sec. 531.02414. ADMINISTRATION AND OPERATION OF MEDICAL TRANSPORTATION PROGRAM.

(a) In this section, 'Medical Transportation Program' means the program that provides non-emergency transportation services to and from covered health care services, based on

medical necessity, to recipients under the Medicaid program, the Children with Special Health Care Needs Program, and the Transportation for Indigent Cancer Patients Program, who have no other means of transportation.

(b) Notwithstanding any other law, the commission shall directly supervise the administration and operation of the Medical Transportation Program.

(c) Notwithstanding any other law, the commission may not delegate the commission's duty to supervise the Medical Transportation Program to any other person, including through a contract with the Texas Department of Transportation for the department to assume any of the commission's responsibilities relating to the provision of services through that program.

(d) The commission may contract with a public transportation provider, as defined by Section 461.002, Transportation Code, a private transportation provider, or a regional transportation broker for the provision of public transportation services, as defined by Section 461.002, Transportation Code, under the Medical Transportation Program.

(b) Subchapter A, Chapter 531, Government Code, is amended by adding Section 531.0057 to read as follows:

Sec. 531.0057. MEDICAL TRANSPORTATION SERVICES.

(a) The commission shall provide medical transportation services for clients of eligible health and human services programs.

(b) The commission may contract with any public or private transportation provider or with any regional transportation broker for the provision of public transportation services.

C. Risk Identification and Assessment

Exhibit VIII-1 provides a summary of the key risks included in this study area. Each risk is then described in further detail below.

Exhibit VIII-1: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Medical Transportation Program	Need for improving coordination and relationship with HHS enterprise	High	• Financial and operational exposure

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Medical Transportation Program	Need to further assess the impact of various medical transportation operational initiatives on client service and overall program efficiency and effectiveness	High	• The experience of the client who receives transportation services • Client access to medical services • Overall program cost

1. Need for improving coordination and relationship with HHS enterprise

TxDOT manages the MTP through an inter-agency agreement with the HHSC. TxDOT does not have the same perspective as Health and Human Services (HHS) agencies and staff regarding MTP service provision. For TxDOT, the service appears to be focused primarily on the physical transportation provided to clients. From the HHS perspective, it includes transportation but seems to have broader focus to include the component of ensuring clients access to medical care.

Currently there is a joint Agency/Department Oversight Committee chaired by senior executives from both HHSC and TxDOT. Many of the operational issues that arise are discussed at this level and further direction is determined. However, there appears to be continued need to coordinate at all levels of the organizations, particularly on the operational level.

Further, because TxDOT is now responsible for delivering services to any client who is eligible for services (Medicaid is an entitlement program), there is substantial operational and legal risk if clients do not receive service. Improving the policy and operational integration between the two responsible organizations will continue to be a significant challenge for TxDOT. Denying service to clients, regardless of the reason, has been a national issues often resulting in litigation.

The ranking for this risk is **High.** This rating is a result of the combined financial and operational exposure that any operational problems could pose for both TxDOT and for the state as a whole.

2. Need to further assess the impact of various medical transportation operational initiatives on client service and overall program efficiency and effectiveness

In June 2006, TxDOT implemented two significant operational changes in the Medical Transportation Program: consolidation of call center functions and new service vendor contracts. Consolidation of the call center functions addressed the imbalance of

staffing in certain call centers when compared to the call volume of those call centers. Further, the consolidation enabled TxDOT to merge the administrative function of vendor claims processing. Lastly, the consolidation created new contract management positions to provide better oversight of service providers, liaisons to the communities and clients served, and a regional presence to provide technical assistance where needed. The selection of new service vendor contracts replaced contracts inherited when the program transferred to TxDOT. Those aging contracts, exceeding five years in length, varied as to scope of services provided and involved 52 contracts that were awarded to 48 separate contractors and involved over 300 different rates for the services provided. TxDOT now has a standardized contract with 15 vendors and a simplified rate structure of two rates per contract.

Recently the Texas State Auditor conducted a status review of these programmatic changes without drawing any substantive conclusions regarding their effectiveness. It is still not clear if these changes are achieving their desired objectives in terms of operational efficiencies. Likewise, it is still not known if these changes will have any impact on the service levels provided to clients. It will be particularly important to assess the impact of these changes on service delivery through analysis of call center activity, claims processing, and complaint statistics. Also of interest is TxDOT's ability to plan for and deploy on a timely basis the call center and other technology needed to keep pace with the expected growth in client demand for services.

The rating for this risk is **High** as result of the possible impact these operational initiatives in the Medical Transportation Program could have on client experience, on client access to medical services, and on overall program cost.

D. Audit Analysis Approach

To further study and analyze the risks identified for this study area, we established a technical working-group of stakeholders to provide guidance and input to the audit team. This stakeholder team consisted of TxDOT management and staff responsible for managing the elements of the study area, and external stakeholders representing various elements of the 'public' impacted by the study area where appropriate. Those participants serving as members of the Medical Transportation stakeholder group included:

- Michele Whaling, Texas Heart, client group representative.
- Maria Gardner, Amerigroup, client group representative.
- Brian Cavazos, Dialysis Clinic, client group representative (invited).
- Linda Amie, Dallas Methodist Medical Center, client group representative (invited).
- Sarah Hidalgo-Cook, Transit and Safety Director, Community Council of Southwest Texas, Inc., provider.
- John Hendrickson, General Manager, Waco Transit, provider.
- Jeffrey Finkel, Vice President, Irving Holdings, Inc., provider.

- Dan Cyr, Operations Director, American Medical Response, Inc.
- Barbara Columbus, MTP Branch Supervisor, TxDOT.
- Joey Herrera, TxDOT, MTP.

Our audit analysis approach, which was executed in conjunction with this stakeholder team, consisted of the following work steps:

1. Perform a detailed analysis of current call center volumes and complaint logs.
2. Conduct interviews with stakeholders, providers and client representatives (i.e. case managers, etc.) to identify possible issues and opportunities with MTP operations.
3. Identify any issues and opportunities with the recent changes to the Medical Transportation service delivery model based on this high-level assessment and review these issues and opportunities with the stakeholder team.
4. Develop estimates of program growth over the next few years and identify potential challenges resulting from this program growth and possible strategies to address these challenges.
5. Review the potential challenges and proposed strategies with stakeholders and update the analysis as appropriate based on stakeholder feedback.

Work in this study area involved conducting detailed interviews with ten TxDOT transportation service area providers (TSAP) and seven medical providers with clients that use the services of the Medical Transportation Program. Exhibit II-2 summarizes these interviews by role and function. In several cases, other staff members were included in the interviews, but are not listed in the table below.

Exhibit VIII-2: TxDOT Interviews Conducted

Name	Title	Organization
Mike Ford	Chief Financial Officer	LeFleur Transportation of Texas, provider
Vicente Huerta	Director, Transportation Program	LULAC Project Amistad, provider
Jeffrey Finkel	Vice President	Irving Holdings, Inc., provider
Gregg Chiasson	Vice President, Client Services	American Medical Response, Inc., provider
Dan Cyr	Operations Director	American Medical Response, Inc., provider
John Wilson	General Manager	Citibus, provider
Robert Stephens	Director of Transportation	Concho Valley Rural Transit District, provider
Teresa Janeaux	Executive Director	East Texas Support Services, Inc., provider
Lisa Cortinas	Director of Transportation Services	Golden Crescent Regional Planning Commission, provider

Name	Title	Organization
Janet Everheart	Executive Director	West Texas Opportunities, Inc, provider
John Hendrickson	General Manager	Waco Transit, provider
Yolanda Hinton		Newton Family Clinic, client group representative
Nicole Wade	Manager, Adult Mental Health Services	Gulf Bend MHMR, client group representative
Melissa Saldivar	Social Worker	DSI Corporation (dialysis center), client group representative
Rene Vallejo	Manager	Loma Vista Dialysis Center, client group representative
Michelle Whaling	Executive Director	Texas Heart, client group representative
Liz George	CFO, COO	Irving Holdings, Inc., provider
James Sasser	Medicaid Transportation Director	Irving Holdings, Inc., provider
Linda Amie	Social Worker, NICU	Dallas Methodist Hospital, client representative

E. Best Practices Survey of Other States

This section summarizes the key findings from the best practices survey of TxDOT peer states that was conducted by the Dye Management Group, Inc. team.

Dye Management Group, Inc. conducted research on the non-emergency medical transportation (NEMT) services provided by other states to determine how their transportation programs are administered. States targeted for the survey effort included states that were similar to Texas in terms of size or demographics or states that had unique arrangements for medical transportation. These states were:

- California.
- Florida.
- Georgia.
- Illinois.
- New York.

The Code of Federal Regulations (CFR) §431.53 states that a state Medicaid plan "must specify that the Medicaid agency will ensure necessary transportation for recipients to and from providers and describe the methods that the agency will use to meet this requirement." CFR §440.170 (a) defines transportation as "expenses for transportation and other related travel expenses determined to be necessary by the agency to secure medication examinations and treatment for a recipient."

The Texas Administrative Code Rule §380.101(26) defines the Texas Medical Transportation Program as a "program which provides prior authorization for non-emergency transportation services to and from covered health care services, based on medical necessity, for categorically eligible Medicaid recipients enrolled in Medicaid, and eligible recipients enrolled in CSHCN, or TICP who have no other means of transportation."

On average, states spend approximately 1% of their Medicaid budgets on NEMT. Ten percent of the Medicaid population nationally utilizes NEMT services. According to the January 2001 primer, "NEMT costs dwarf all other human service transportation expenditures – and equal almost 20% of the entire federal transit budget…Medicaid payments today are an important source of revenue for transit providers in many states" (p. 6).[10]

According to a 2005 cost-benefit analysis of NEMT,[11] about 3.6 million Americans miss or delay non-emergency medical care each year because of transportation issues. This target population was found to have a higher prevalence of chronic diseases and a higher rate of multiple chronic conditions. The researchers found that providing additional NEMT is cost-effective for all 12 of the conditions they analyzed (influenza vaccinations, prenatal care, breast cancer screening, colorectal cancer screening, dental care, asthma, heart disease, chronic obstructive pulmonary disease, hypertension, diabetes, depression/mental health, and end-stage renal disease); for four of these conditions (prenatal care, asthma, heart disease, and diabetes), the researchers found that providing additional NEMT is actually cost saving (i.e., "additional investment in transportation leads to a net decrease in total costs when both transportation and healthcare are examined," p. 2).

According to a 2005 article from the Community Transportation Association (CTAA)[12], two trends in healthcare are apparent: there is an increasing number of chronic patients, and there is an increasing dependence on outpatient care. The impact of these trends is that there is a demand for more investment in both the community and in public transportation, because "investment in community and public transportation is an investment in the healthcare system" (p. 35).

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[10] Raphael, David. Community Transportation Association of America (CTAA). "Medicaid Transportation: Assuring Access to Health Care: A Primer for States, Health Plans, Providers and Advocates," January 2001. http://www.ctaa.org/ntrc/medical/report/, accessed 1 May 2007.
National Consortium on the Coordination of Human Services Transportation. "Medicaid Non-Emergency Transportation: National Survey 2002-2003," December 2003. http://www.ctaa.org/ntrc/coordination/docs/reports/NEMT2002-3.pdf, accessed 2 May 2007.

[11] Community Transportation Association of America (CTAA). "Cost Benefit Analysis of Providing Non-Emergency Medical Transportation," October 2005. http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_webdoc_29.pdf, accessed 7 May 2007.

[12] Hensley-Quinn, Maureen. "Trends in Healthcare Impact Trends in Medical Transportation," 2005. http://www.ctaa.org/ct/winter05/winter.34-35.pdf, accessed 8 May 2007.

1. NEMT matrix

Exhibit VIII-3 on the following page shows a comparison of several Medicaid and NEMT statistics for Texas and the states selected for comparison. The table incorporates information from a variety of sources and the most current information is shown. One of the drawbacks of the comparison is that some of the information is dated.

Compared to these states, Texas has relatively low NEMT expenditures as a percent of the Medicaid budget and a low percentage of Medicaid enrollees participating in the Texas MTP program – 4% as compared to a national average of 10%. Texas has a relatively high Federal Medical Assistance Percentage (FMAP) rate – the percentage the federal government establishes for each state and utilizes in determining the amount of federal matching funds for state expenditures for assistance payments for certain social services, and state medical and medical insurance expenditures. Texas is currently being reimbursed at the FMAP rate for MTP but may have to reimburse the federal government for MTP expenditures at the lower administrative rate retroactive to 2004.

Of these states, only Texas and Georgia do not have NEMT included as a Medicaid managed care service (‘carved in’ as part of an integrated program) at all.

Exhibit VIII-3: Comparison of NEMT Programs in Peer States

	U.S.	Texas	California	Florida	Georgia	Illinois	New York
2004-2005 Population[1]	292.9 M	22.5 M	35.8 M	17.6 M	8.8 M	12.6 M	19.0 M
STATE MEDICAID PROGRAMS							
FY 2003 Medicaid enrollment[1]	55.1 M	3.7 M	10.0 M	2.8 M	1.6 M	2.2 M	4.6 M
% of total population[1]	19%	17%	28%	17%	19%	17%	24%
FY 2005 Medicaid expenditures (including DSH)[1]	$305.3 B	$18.4 B	$34.0 B	$13.4 B	$7.8 B	$10.9 B	$43.4 B
FY 2003 Expenditures per enrollee[1]	$4, 072	$3,371	$2,520	$3,621	$3,061	$3,552	$7,853
FY 2007 FMAP[2]	57%	61%	50%	59%	62%	50%	50%
2005 Enrollment in Managed Care[3]	63%	48%	50%	66%	96%**	10%	61%
NON-EMERGENCY TRANSPORTATION							
2001 NEMT Expenditures[4]	$1.8 B	$27.8 M	$89.5 M	$62.0 M	$50.0 M	$40.0 M	$261.0 M
% of Medicaid budget[4]	1.0%	0.3%	0.4%	0.9%	1.3%	0.6%	0.9%
2001 Expenditures per recipient per month[4]	$3.71	$1.00	$1.05	$2.71	$3.41	$2.44	$7.08
2001 Users as % of Medicaid population[4]	10%	4%***	N/A	9%	<10%	9%	N/A
FY 2002 NEMT trips[5]		3,453,182 one-way trips		632,634 one-way trips; 1,442,685 two-way trips	2,883,626 one-way trips; 47,944 two-way trips; 18,521 'other'	1,449,290 one-way trips	
% of trips on public transit[4]	22%	0%	5%	34%	0%	N/A	N/A
2001 Average cost per trip[4]	$16	$11	$75*	$17	$17	N/A	N/A
2001 Trips per 1,000 recipients[4]	2,840	1,041	169	169	1,956	N/A	N/A

	U.S.	Texas	California	Florida	Georgia	Illinois	New York
2001 NEMT included under CHIP program[4]		Yes	Partial	Partial	No		Partial
2001 NEMT included under HCBS program[4]		Yes	Yes	Yes	Yes	Yes	Yes
Type of Broker[4]		N/A	N/A	County bid contract	Regionally bid contracts		County and HMO contracted
Waiver or SPA to provide NEMT[6]		No	No	Yes (1915(b))	Yes (1915(b))	No	Yes (1915(b)), but no longer operating under waiver
2004 Co-payment required[7]				$1/trip	$1/trip		
2004 Prior approval required[5,7]		All services are prior approved and are subject to retrospective review.	All services are prior approved. If there wasn't time for prior approval, the service is retrospectively reviewed.	Prior approval required for wheelchair and stretcher van services.		Prior approval required for all NEMT with the exception of residents of long-term care facilities. Services are subject to retrospective review as well.	Yes
2003 NEMT reimbursement rate[5]		Administrative match rate***	Medical services match rate	Medical services match rate	Medical services match rate	Medical services match rate	Both medical services and administrative expenses
2003 Medicaid managed are carved-in[5]		No	Yes	Under Medicaid managed care, NEMT is carved out, **** except when provided as an optional service by a Medicaid HMO.	No	Yes	Yes, in some local departments of social services (LDSSs).
2003 Fee-for-service (FFS)[5]		Yes	Yes. Fee-for service component is managed in-house.	Yes	No	Yes	Yes, in some local departments of social services (LDSSs).
2003 Capitated[5]		No	NEMT is included in the monthly capitation rate. Under Medicaid managed care, NEMT is included in the capitation rate for each health plan.		Yes		

U.S.	Texas	California	Florida	Georgia	Illinois	New York
2003 In-house management[5]	Yes. In-house staff receives NEMT requests via toll-free calls, verifies eligibility, authorizes trips, processes any pays claims, and performs quality control functions.	Yes. Health plans (for managed care) and Department of Human Services staff (for fee-for-service) review prior approval requests.	No	No	Yes	Yes, in some local departments of social services (LDSSs).
2003 Transportation broker[5]	No external broker, but in-house management acts as broker.	No	Yes. Brokers provide statewide direct transportation and administrative services. Brokers are reimbursed via fee plus provider costs. Regional brokers provide statewide direct and administrative NEMT. Brokers reimbursed fee plus provider cost.	Yes. Provision of NEMT is under a capitated brokerage arrangement. NEMT carved out of managed care, with 2 regional capitated brokers providing statewide service.	No	Yes, in some local departments of social services (LDSSs). Regionally administered, with some regions using transportation waivers and brokered systems.
2003 Data collection[5]	Administers a transportation data system separate from the MMIS.	Via MMIS.	Via encounter data collection, compiled in a yearly summary by county. Monthly complaint information is also compiled.	Via encounter data by the contractors.	Separate transportation data system. Managed care providers submit encounter data and annual reports.	In 2002, working on enhancing data collection capabilities. Hoped to have new data reporting systems in place soon to enable state administration to get a better picture of statewide utilization and cost.

[1] The Kaiser Commission on Medicaid and the Uninsured. "Medicaid Fact Sheets," 2003-2006. www.statehealthfacts.org, accessed 16 May 2007.
[2] Federal Register/ Vol. 70, No. 229 / Wednesday, November 30, 2005. http://aspe.hhs.gov/health/fmap07.pdf, accessed 8 May 2007.
[3] Centers for Medicare & Medicaid Services (CMS). "Medicaid Managed Care Enrollment Report," June 30, 2005. http://www.cms.hhs.gov/MedicaidDataSourcesGenInfo/Downloads/mmcer05.pdf, accessed 16 May 2007.
[4] Raphael, David. Community Transportation Association of America (CTAA). "Medicaid Transportation: Assuring Access to Health Care: A Primer for States, Health Plans, Providers and Advocates," January 2001. http://www.ctaa.org/ntrc/medical/report/, accessed 1 May 2007.
[5] National Consortium on the Coordination of Human Services Transportation, "Medicaid Non-Emergency Transportation: National Survey 2002-2003," December 2003. http://www.ctaa.org/ntrc/coordination/docs/reports/NEMT2002-3.pdf, accessed 2 May 2007.
[6] Centers for Medicare & Medicaid Services (CMS). "Medicaid Waivers and Demonstrations List." http://www.cms.hhs.gov/MedicaidStWaivProgDemoPGI/MWDL/, accessed 30 April 2007.
[7] Kaiser Family Foundation. "Benefits by Service: Non-Emergency Medical Transportation Services," October 2004. http://www.kff.org/medicaid/benefits/service.jsp?yr=2&cat=3&nt=on&sv=21&so=0&tg=0, accessed 2 May 2007.

[*] Number indicated as reported in 2001 primer. Not certain if correct or if typographical error.
[**] Number indicated as reported in 2005 Medicaid Managed Care enrollment report. Number represents 1.3 M Managed Care enrollees of the 1.4 M Medicaid enrollees.
[***] Updated by Dye Management as a result of audit findings. Although Texas is claiming the FMAP rate, CMS has been reimbursing at the administrate rate since the beginning of federal fiscal year 2004.
[****] "Carved out" refers to direct reimbursement to transportation providers on a fee-for-service basis.
N/A indicates that the data is not provided in the source cited.

2. Waivers and state plan amendments

Prior to the Deficit Reduction Act (DRA), signed by President Bush on February 8, 2006, states had to request a waiver, typically a 1915(b) waiver, to administer the NEMT program differently than other Medicaid services that require states to meet specific requirements that can inhibit cost containment and operational efficiency. According to the 2005 National Summary of State Medicaid Managed Care Programs, ten states currently have NEMT waivers: Arkansas, Florida, Georgia, Kentucky, Mississippi, Nevada, New York, Oklahoma, Oregon, and Utah.

Since 2005, three states (New York, Oklahoma, and Utah) have allowed their waivers to expire. However, the DRA of 2005 allows states to make changes to their NEMT programs through a state plan amendment rather than a waiver. The DRA allows states to provide NEMT through a broker, but states must select brokers through a competitive procurement process. Idaho, Kansas, Kentucky, Virginia, and West Virginia have approved state plan amendments, although only those of Idaho and Kentucky appear to include NEMT[13.]

3. Service delivery models

NEMT services can be delivered in a number of ways:

a. Optional medical service or administrative service

NEMT services may be reimbursed at either the FMAP rate[14] or the administrative rate of 50%. To qualify for the higher FMAP reimbursement, the NEMT service delivery model must meet all of the requirements for the provision of an 'optional medical service.' These requirements include providing recipient freedom of choice, providing services statewide, offering open participation by all qualified providers, and providing the same level of service to all Medicaid clients. Restrictions on any of these requirements, such as providing services through a broker arrangement or requiring clients to use a particular provider, results in reimbursement at the administrative rate, unless the state has a waiver or a state plan amendment approved by the federal Centers for Medicare and Medicaid Services (CMS).

The freedom of choice provision "generally limits a state's flexibility to design cost-effective schemes for coordinating medical transportation services" (January 2001 primer, p. 7). While operating NEMT as an administrative service allows a state more flexibility, it does not maximize the federal reimbursement. According to a December 2003 report from the National Consortium on the Coordination of Human Services Transportation, half of the states operate NEMT as an optional medical service, almost

[13] http://www.cms.hhs.gov/DeficitReductionAct/03_SPA.asp.
[14] FMAP – Federal Matching Assistance Percentage is the rate at which the federal government reimburses states for spending on Medicaid. In Texas, it usually ranges around 60-61%.

a third operate the program as an administrative service (five of those states have an FMAP rate equal to the administrative rate), and the remaining states use a combination.

b. Brokerage model

According to a December 2003 report from the National Consortium on the Coordination of Human Services Transportation, 21 states have transportation brokerages: Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Kentucky, Maryland, Massachusetts, Missouri, Montana, Nevada, New York, Oklahoma, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Virginia, and Washington. The brokerage model refers to coordinated systems that provide non-emergency medical transportation. These models "may be risk-based, capitated arrangements, with provider accreditation, enrollment, and monitoring".[15] Brokers may or may not operate under risk-based capitated contracts.

Because brokerage models limit client freedom of choice[16], brokerage models are funded at the administrative match rate, unless the state has a waiver or a state plan amendment. These models include three states that carve NEMT out of managed care and administer all NEMT through a single statewide, capitated broker, one state that contracts with a statewide broker to provide NEMT for all non-managed care populations, two states that have a statewide capitated broker that provides NEMT for all of the non-managed care Medicaid population, six states that use regional capitated brokers with statewide broker coverage, and three states that administer NEMT with a state agency that acts as a broker (National Survey, pp. 10-11). Seventy-three percent of respondents reported using either brokered or managed care models to help administer the program.

Brokerage models have an increased focus on determining the least expensive, appropriate mode of transportation for each trip. States also reported the benefits of capitated arrangements in terms of cost containment resulting from a fixed cost for each recipient, thus holding constant factors of utilization and cost of services. In addition, states saw brokered systems as a way to delegate the monitoring of fraud and the inappropriate use of transportation services. While it is important to control costs, quality of service to the clients served cannot be sacrificed to cut costs.

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[15] National Consortium on the Coordination of Human Services Transportation. "Medicaid Non-Emergency Transportation: National Survey 2002-2003," December 2003, page 9. http://cwd.aphsa.org/publications/docs/NEMT_survey_report_Dec2003.pdf, accessed 2 May 2007.

[16] Medicaid requires its enrollees have freedom of choice in their selection of providers for all eligible services. The freedom of choice requirement can be "waived" if the state requesting the waiver meets certain requirements to gain federal approval.

c. In-house managers

In the 2002-2003 survey, 33 states (including California, Illinois, New York, and Texas) reported that they have in-house managers to oversee their NEMT programs. Some states allow some of their localities authority to construct service-delivery models to meet their needs or to have private or government agencies do so. In the January 2001 Medicaid transportation primer, in-house managers are described as internal solutions used to manage both costs and utilization of services through monitoring both providers and recipients of transportation services or more indirectly through contracts with county or regional agencies that handle administrative functions.

d. Capitated payments

The options for payments are capitation and fee-for-service. Eighty-one percent of states use a fee-for-service arrangement. According to the 2005 National Summary of State Medicaid Managed Care Programs, there are three types of reimbursement for service delivery: (1) fee-for-service (i.e., the plan or care manager is paid for providing services to enrollees through fee-for-service payments and often through a case-management fee; (2) full capitation (i.e., the plan or case manager is paid for providing services through capitation; and (3) the plan or case manager is paid for providing services through a combination of capitation and fee-for-service reimbursements. Twenty-three survey respondents in the 2002-2003 national NEMT survey reported inclusion of NEMT in their Medicaid managed care plans; 12 of these 23 respondents indicated that NEMT is included in the managed care capitation.

e. Inclusion in managed care

NEMT services can be included in managed care contracts ('carved in') in which the managed care organization must provide transportation for its enrollees, or they can be included in a separate managed care arrangement or provided on a fee-for-service basis ('carved out'). From the December 2003 report from the National Consortium on the Coordination of Human Services Transportation, 45% of states include NEMT in Medicaid managed care plans. Half of those states include NEMT in the managed care capitation, and two of the states set the capitation rate for NEMT separately. Ten states use a combination of reimbursement methods. Forty-one states report using a fee-for-service component in their NEMT program design.

According to the December 2003 report from the National Consortium on the Coordination of Human Services Transportation,[17] 30 states report that they are implementing cost-containment measures for their NEMT programs, including broker

[17] National Consortium on the Coordination of Human Services Transportation, Medicaid Non-Emergency Transportation: National Survey, 2002-2003. http://www.ctaa.org/ntrc/coordination/docs/reports/NEMT2002-3.pdf, accessed 2 May 2007.

models, capitated arrangements, transportation passes for public transit options available in a community, and other measures.

"There is a growing recognition within federal and state circles that the traditional, decentralized, fee-for-service approach to non-emergency Medicaid transportation has not been very effective in controlling costs or fraud and abuse or in assuring universal access to medical care" (p. 10).[18]

4. Relationship between state departments of transportation and Medicaid

A 2006 survey of state Medicaid agencies, state departments of transportation and transit agencies in ten states conducted by the Transit Cooperative Research Program (TCRP) examined the relationships between public transit and NEMT.[19] Responses to the survey indicate that state agencies administering the Medicaid program do "not understand the complexity of transit regulations," (p. 18). Among the states surveyed, four general levels of coordination were found between Medicaid agencies and state transit agencies: (1) periodic contact, (2) regularly scheduled meetings, (3) formal coordination agreements, and (4) legislative mandates (found in Florida and Texas).

Most states that use a brokerage system in the delivery of NEMT use a regional or county system. In Texas, TxDOT serves as a single, statewide broker in which TxDOT operates the brokerage system in-house. Georgia's five regions are covered by two brokers, and many of their service providers are entities other than public transit operators. Florida has community-based brokers that service multiple funding agencies.

The 2006 TCRP survey found that certain factors can create a more successful NEMT program. These factors include:

- Local operational coordination.
- Trust at the local level.
- Service delivery models that encourage coordination among the state's transit agencies and the brokers and operators of services.
- Fixed-route services.
- Mutually acceptable arrangements between the brokers and the service providers.

[18] Community Transportation Association of America. "Medicaid Transportation: Assuring Access to Health Care: A Primer for States, Health Plans, Providers and Advocates," January 2001. http://www.ctaa.org/ntrc/medical/report/, accessed 1 May 2007.
[19] Transit Cooperative Research Program (TCRP). "Transit Agency Participation in Medicaid Transportation Programs: A Synthesis of Transit Practice," Transportation Research Board, Washington, D.C., June 2006. http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_65.pdf, accessed 17 May 2007.

F. Key Findings

Based on our review of operational statistics, our best practices survey of peer states, discussions with TxDOT staff and stakeholders, and our detailed review of various alternatives, this section summarizes our key findings in regard to the Texas Medical Transportation Program. These key findings include the following:

1. The division of governance and operational responsibilities between the Health and Human Service Commission (HHSC) and the Texas MTP at TxDOT present both policy and operational coordination challenges for both organizations

In 2003, as part of a comprehensive reorganization and consolidation of the state's Health and Human Services (HHS) agencies and services enacted by HB2292, 78th Legislature, Regular Session, the Texas MTP moved from the HHS enterprise to TxDOT. This change was made for two primary purposes:

- To leverage the existing transportation infrastructure and take advantage of economies of scale to assist in containing cost and providing quality services; and to further seed development of a non-emergency transportation infrastructure that would both make better use of what was already in place and create additional transportation solutions, whether by fixed route or other public transportation alternatives.
- To use Fund 006, a dedicated state transportation account funded with revenue from the motor fuels sales tax, as the source of matching state dollars (to match the federal Medicaid dollars), that would allow the state budget writers to offset non-dedicated General Revenue (GR) costs and as such help close the $10 billion budget gap the state was facing in 2003 for the 2004-2005 biennium.

In so doing, Texas applied innovative approaches to both leverage state funds in the most economical way available and to gain transportation efficiencies in the MTP by using the transportation agency and the expertise available there. Texas is in fact the only state in which the MTP is not run by the Medicaid single-state agency.

However, the Centers for Medicare and Medicaid Services (CMS) - as the federal oversight and funding partner of the program - has raised several significant issues regarding placement of the program at TxDOT that the state must face and resolve. CMS has expressed particular concern around the issue of the single-state Medicaid agency. Every state governor designates a specific agency to be the single-state agency with primary responsibility for administering the Medicaid program. The federal government views the designated state Medicaid agency as the entity ultimately responsible for ensuring compliance with federal regulations under the Medicaid program. Therefore, all efforts to secure Medicaid federal financial participation (FFP) must be approved and overseen by this entity. As a result, CMS has raised several

issues with the State of Texas regarding its approach of placing the MTP with TxDOT. Among these are:

- Direct Medicaid appropriations to other state health and human services agencies have been called into question.
- Direct Medicaid appropriation to TxDOT for MTP has also been called into question.
- CMS has disallowed reimbursement of some services at the FMAP rate (approximately 60%) and is only willing to reimburse at the administrative rate of 50%. The current funding gap resulting from the federal disallowance (to be filled with state funds) is $15 million and growing.

While the state negotiates with CMS regarding its concerns, Texas's pending state plan amendment remains unapproved. As a result, Texas cannot take advantage of best practice approaches for medical transportation available under waiver or the 2005 Deficit Reduction Act. Among these best practices are various transportation brokerage arrangements. While TxDOT currently acts as the state's transportation broker, technically the state has not received federal approval to operate a broker model. Without approval, the current brokered operation at TxDOT violates the Medicaid 'freedom of choice' provisions that require the state to provide eligible clients a ride without restriction. Brokerage arrangements are by their very definition restrictive in order to contain cost by promoting the least costly transportation mode available to a client.

To address the complex situation in which the state finds itself with its federal oversight partner, state decision-makers passed legislation to move MTP to HHSC, the single-state Medicaid agency. This move will help to resolve the state plan amendment issues, which would in turn assist with the current $15 million disallowance. Please note that even with the transfer to HHSC, there are other issues that CMS has raised concerning MTP operations that were in place prior to the transfer to TxDOT and will continue with the transfer to HHSC.

In addition, the federal requirement that HHSC provide policy oversight as the single-state agency has also complicated governance of the program. It has been identified that there is a disconnect between some Medicaid MTP and Medicaid medical policy rules. Finally, complications associated with the Frew lawsuit and the current settlement agreement will likely require expanded service delivery and will increase MTP workload. Issues surrounding access to medical services that were the genesis for the lawsuit makes adhering to hard and fast scheduling cut offs difficult to enforce. Issues to be addressed by the state's corrective action plan will require both HHSC and TxDOT to coordinate efforts even more closely. That coordination will be particularly important to meeting the lawsuit performance requirements and in documenting the state's efforts to do so.

2. Stakeholders' views regarding TxDOT's performance in operating MTP are primarily positive

Providers had many positive comments about several initiatives recently implemented by TxDOT and for the benefits of having the Texas MTP program managed by TxDOT. Those strengths and successes include:

- TxDOT understands transportation. There is stricter monitoring of vehicles and stronger polices and requirements, such as the implementation of a drug and alcohol policy and criminal background checks. The agency has tools to provide support and guidance that are the norm in the transportation industry. There is more access to transportation-specific training.
- TxDOT has made processes more efficient and has made progress in automating processes such as the daily manifest and the automatic/direct billing processes. As a result of the automated billing system, payments to providers have been much faster since the beginning of 2007. As of May 1, 2007, all TSAPs are using electronic billing.
- TxDOT is forward thinking and the TxDOT management style is strong and managers tend to listen and be active in resolving issues.
- Several providers indicated that they like the regionalization approach, which has helped coordination with other providers in their regions.

Interviewees indicated that TxDOT still has a learning curve for the MTP program and will continue to gain experience with this program. Although TxDOT has extensive knowledge and oversight for_public transportation services, including special transit services and Elderly and Disabled Services, the Texas MTP presents a change in client need that, at times, requires deviating from a fixed route approach. Other comments related to areas of improvement for TxDOT include the following:

- There were comments by some stakeholders regarding a long wait for reimbursement for mileage for clients who arrange other transportation as well as a delay in clients receiving applications for this service. TxDOT has indicated that this is not a significant issue and that claims are paid within 30 days and any delay beyond that is normally due to the client not submitting the proper paperwork.
- Some providers indicated that there are overlaps in monitoring of the Texas MTP program and that monitoring is conducted by two different sections within the Public Transportation Division at TxDOT. These providers also reported providing duplicate documentation to different offices at TxDOT. This is likely the result of there being providers under MTP who also receive other transportation grants from TxDOT. Public Transportation Coordinators monitor federal transit grant recipients for transit operators. MTP contract specialists monitor TSAPs for contract compliance. The PTC are district-based under the

guidance of the Public Transportation Division in headquarters and the MTP contract specialists are currently housed in Public Transportation Division.

- There is a desire by some providers to have more sources of funding available to purchase vehicles. There is a belief on the part of some providers that some organizations receive funds or a vehicle for a specific purpose Furthermore, these providers believe that those vehicles are frequently not in use and that all TxDOT funded vehicles should be monitored and coordinated with the Texas MTP program. Follow-up discussions with the MTP Section indicate that providers are confused on this point. MTP does not have a 'system of vehicles.' MTP is simply a purchased service – the service being the trip.

In addition to the suggestions for improvements to TxDOT, the following issues were raised about local service, primarily by the client groups interviewed:

- Clients living in rural areas are often picked up very early for appointments and arrive at their appointment very early. Clients can also wait a while after an appointment for the return ride home.
- The reliability of providers is sometimes reduced, especially in rural areas and subcontractors may not be as responsive or reliable as the prime contractor. Driver no-shows were reported.
- Some clients indicate that they would like more assistance during pick-up and drop-off from the drivers than the drivers are allowed or willing to give. Liability issues for transit providers prohibit door-to-door services and clients needing this type of assistance should obtain an attendant.

3. A number of opportunities for improvements to and clarifications of the contracting process were identified by transportation providers

The request for proposal (RFP) and the contracting process to obtain medical transportation providers were perceived to be very different in 2006 than in previous years. The process was lengthy and characterized as different than other TxDOT programs. Rather than having different processes, providers thought that the programs could utilize a procurement process which would be more similar. However, not all providers found the process cumbersome.

The change from a 4-year contract to a 3-year contract with two renewal options is considered a positive step. Under the current contract, providers had to submit proposals for very large regions, which was challenging but also provided an opportunity for providers to learn and grow and implement good service.

Some of the specific areas of the contract that may need clarification include the clarification of time periods for background checks on DUI violations and a review of whether the provider requirement of no pending lawsuits is too restrictive.

4. Transportation providers find the procedures for creating the daily manifest and the information on the manifests confusing

Although transportation providers that download the daily manifest electronically are pleased with that capability, there were several issues cited with the daily manifest:

- Client addresses are not always correct and updated. Conversations with TxDOT staff indicate that they are aware of this problem and are currently working on an automated address verification system to enhance the quality of the eligibility file received from HHSC.
- Phone numbers are often not correct, limiting the provider's ability to call clients.
- Multiple trips for a client are reported to be shown as occurring five minutes apart, which can cause significant logistical problems for drivers. The short interval was requested by providers to flag a multiple trip client but may need to be revisited to ensure that it is the most effective way to indicate this status.
- Rule §380.205(1) of the Texas Administrative Code requires that all requests for 'routine' medical transportation be made at least two working days in advance of a medical appointment. An urgent, same-day request may be approved per Rule §380.101(38). Exceptions can be granted when the circumstances have been determined to be beyond the recipient's control (Rule §380.205(3). The same-day requests, which are add-ons to the manifest, require constant daily double checking of the manifest to capture changes and to avoid dropping rides. This is a governance and coordination issue, since Medicaid managed care rules allow patients to schedule an appointment with a medical provider on 24-hours prior to the appointment.
- Providers would like to have more specific information, if it is available, on where to pick up clients after an appointment – i.e., where in a medical complex the client will be. Drivers can cause delays in pick ups if time is spent driving around a large complex looking for a client. Intake staff does take notes regarding pick up information if the client has the specifics.
- While the purpose is to get clients to their scheduled health care appointments, when clients schedule both a local and a long-distance health care appointment on the same day it can cause some inefficiencies. This may require dedicating a single driver and vehicle to that individual, which is inefficient for the individual driver, and for the overall service delivery, thus raising the cost of the service.

5. Call center performance challenges have been identified by in-house and external sources

Some interviewees indicated that the consolidation of the call centers did not affect them and did not report problems with the call centers. However, many providers and client groups reported a number of issues related to call center operations:

- There is overall concern by transit providers and client groups that call centers may be understaffed and that existing staff lack training about the Texas MTP and the Medicaid program. Reports include that program knowledge is not uniform across operators, and inconsistencies are reported in business practices.
- Long wait times have occurred in the past to get through to a call center operator.
- Medical providers are not intended to arrange for rides on behalf of clients. Some client groups indicate that they do this as a regular practice and see it as necessary to getting clients to appointments.
- Pre-scheduling next month's appointments works fairly well for client groups that arrange this for their clients. Usually a list of clients and appointment times is faxed to the call center. While verification of Medicaid eligibility as determined by HHSC is required, it can provide for a limited 'window' for scheduling next month's trips.
- El Paso's time difference (Mountain time versus Central time in most of the state) causes confusion in terms of cut off times and call center hours on the part of clients and client advocates.
- Compliance with call center performance measures (i.e. the maximum of a 90-second hold time before a client is able to talk to a provider) may compromise quality. Call center staff struggle to balance timely call completion to avoid long hold/wait times while assuring that quality information and services are provided to clients and client representatives who call.

The study team conducted a high level analysis of call center performance. This study confirmed a number of challenges faced by call center staff, including the consolidation of the MTP call centers from nine centers to three centers, as well as the implementation of new contracts with transportation providers. While both of these changes were positive in nature they were both deployed in the summer of 2006 which created some operational challenges during the implementation process.

TxDOT continues to strive to improve the options and ease for clients to schedule transportation. Other operational improvements are also underway such as monitoring individual calls. This approach will assist call center managers to target efforts for improvement. It is important to note that restrictions imposed from the Frew settlement could prohibit some of these efforts.

6. There is not a comprehensive, objective issue resolution system in place

The current complaint process is characterized by the majority of providers interviewed as overly subjective; they would prefer a more fact-based objective handling when researching complaints. Interviewees had a perception that call center staff 'rush' to file formal complaints from clients about providers. They also report

that it is difficult to get a supervisor to resolve an issue; this has to be done through email and it may take several days to get a reply.

Prior to July 2006, complaints were tracked in a Microsoft Access database and were addressed by call center and central office staff. This database was utilized by TxDOT to handle and resolve issues that arose and provided a means to track and document the complaints. While it was useful to have the database, in some cases data entry was backlogged, inconsistent and sometimes duplicative. Complaints were sometimes entered as open complaints and sometimes entered only when resolved. Responsibility for complaints was rotated among staff, contributing to the inconsistency.

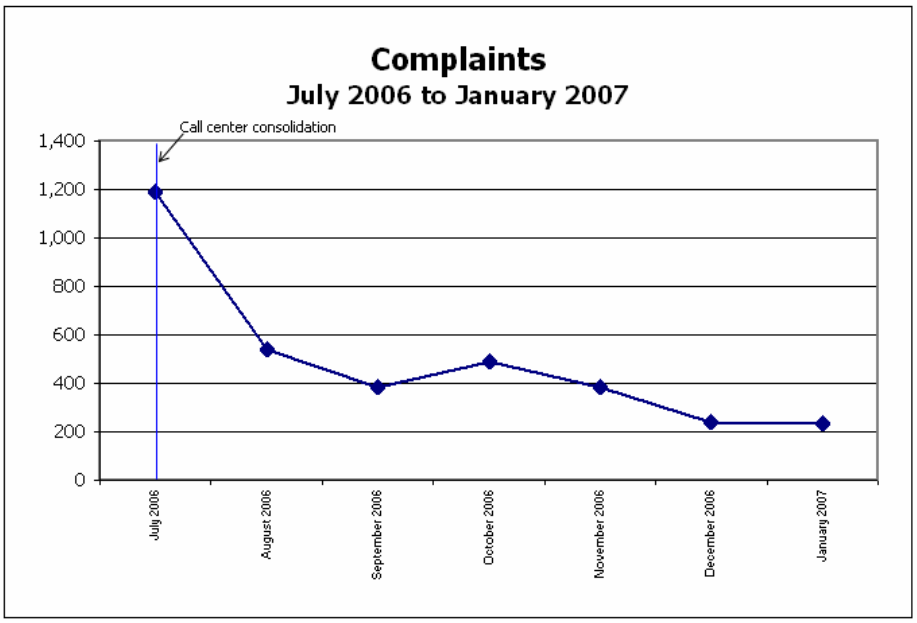
TxDOT currently uses a complaint form (Form MTP-1004, approved in February 2007) that details such information as the client's Medicaid number, the date and time of his/her appointment, the time the contractor was called for pickup (if applicable), the time the contractor arrived (if applicable), as well as complaints relating to MTP telephone problems. The call center staff members prepare an electronic copy of Form MTP-1004 when a complaint is filed against an MTP staff member or contractor.

If the complaint is against a transportation service area provider (TSAP), call center staff members send the complaint form to one of six contract specialists. The contract specialist works with the TSAP to resolve the issue according to the procedures in place. If the complaint is against the call center, the agent sends the complaint form to the appropriate call center manager or designee for resolution.

All Form MTP-1004s are kept until all related complaints have been closed, after which time the forms are retained for four years.

Exhibit VIII-4 summarizes data provided by TxDOT regarding the number of complaints about providers received at the call centers from July 2006 to January 2007 One-third of all complaints occurred during July 2006 – the same month during which the call center consolidation occurred and when the new provider contracts began. Beginning in FY 2007, the number of complaints decreased to fewer than 600 complaints per month. By the second quarter of FY 2007, complaints decreased to fewer than 250 per month.

Exhibit VIII-4: MTP Call Center Complaints Logged, July 2006 to January 2007



TxDOT plans to develop a process for inputting complaints into (Transportation Electronic Journal Authorization System) (TEJAS). This may provide a framework for additional streamlining of the complaint resolution process.

7. A number of factors are likely to contribute to program growth and increased costs

There are number of factors which are likely to contribute to growth in the size of MTP and increase the cost of program delivery. These include:

- HHSC program forecasts show an anticipated increase in Medicaid caseload and associated MTP program expenditures.
- Impact of the federal government reimbursing Texas at the administrative rate rather than the higher FMAP rate.
- Impact of the Frew lawsuit in terms of tighter program standards and increased use of the program as a result of outreach efforts required by the settlement.

Each of these factors is discussed in greater detail below.

a. Program forecasts

According to forecasts from HHSC, both Medicaid caseload and Texas MTP program expenditures are expected to grow in the coming years, as shown in the charts below. Exhibit VIII-5 depicts the anticipated increase in Medicaid caseload. Exhibit VIII-6

illustrates the anticipated increased in expenditures for MTP in Texas. Please note that this data is for Medical Transportation only.

Exhibit VIII-5: Texas Medicaid Case Load Forecast through FY 2010

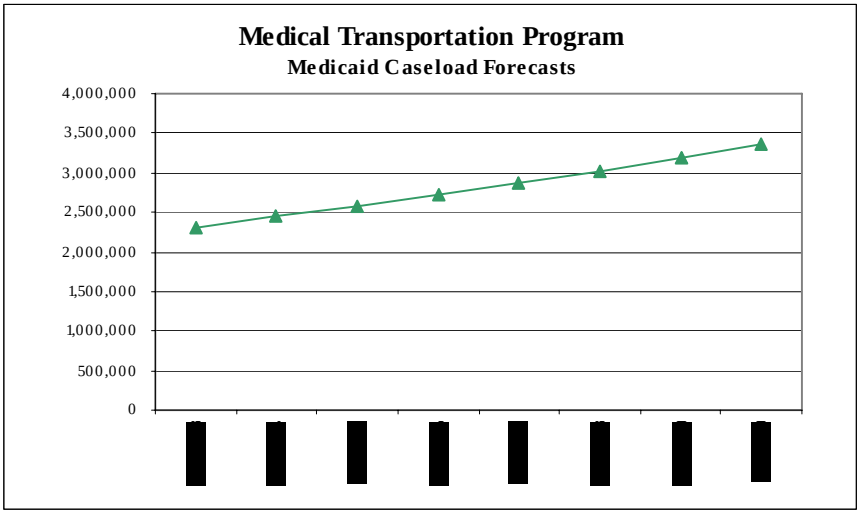
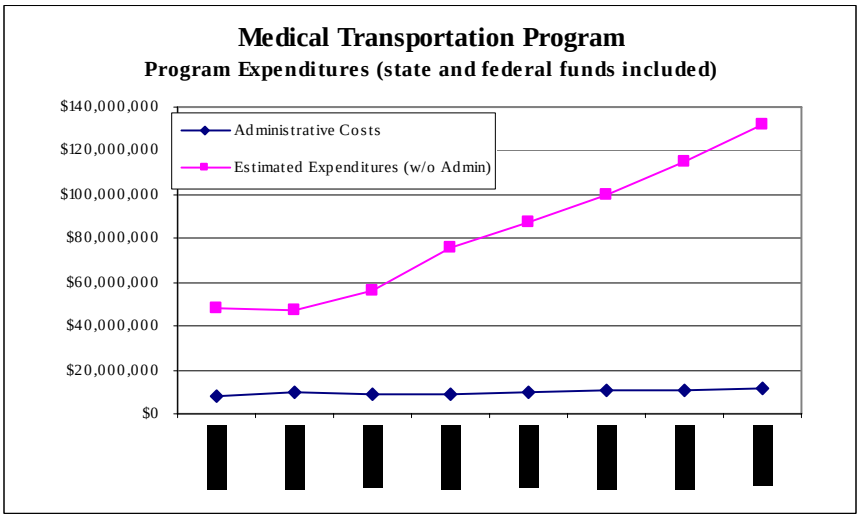


Exhibit VIII-6: Texas Medical Transportation Program Expenditures through FY 2010



Source: System Forecasting, Financial Services, Texas Health and Human Services Commission, May 2007.

However, these projections do not take into account the following cost drivers.

b. Federal reimbursement

According to a series of memos from CMS to HHSC in the second half of 2006, CMS has disallowed about $15 million in federal reimbursements dating back to federal fiscal year 2004. As discussed in Section VIII.F.1, the fiscal impact is due to the position of the federal government that the Texas MTP program is in violation of Medicaid rules (and has been since 2004). That violation means that TxDOT should only receive the federal administrative match of 50% rather than the higher federal medical assistance percentage (FMAP) rate of 61%.

The FMAP is the federal government's share of a state's expenditures for Medicaid. The FMAP for each state is determined annually based on a formula using the per capita income of each state. The formula is designed to pay a higher FMAP to states with lower per capita income relative to the national average (Congressional Research Service, CRS Report for Congress, Federal Medical Assistance Percentage (FMAP) for Medicaid, March 1, 2005).

NEMT services may be reimbursed at the FMAP rate or the administrative rate of 50%. To qualify for the higher FMAP reimbursement, the NEMT service delivery model must meet all of the requirements for the provision of an 'optional medical service.' These requirements include providing the recipient freedom of choice, providing services statewide, open participation by all qualified providers, and the same level of service to all Medicaid clients. Restrictions on any of these requirements, such as providing services through a broker arrangement or requiring clients to use a particular provider results in reimbursement at the administrative rate unless the state has a waiver or a state plan amendment approved by CMS.

While Texas has filed a state plan amendment that would allow the current service delivery model for the Texas MTP program to receive the higher FMAP reimbursement, this proposed plan amendment has not yet been approved by CMS. Until and unless the state plan amendment is approved, Texas will only be reimbursed at the 50% rate. Thus, while the current Texas model allows the most flexibility in service delivery, it does not maximize federal match rates.

Current state projections for Texas MTP expenditures through 2010 do not take into account the lower federal reimbursement rate. Unless the reimbursement returns to the FMAP rate, expenditures will continue to be out of line with projections and the gap between the anticipated federal reimbursement level and the actual level will continue to grow and will be need to be filled with state funds.

c. Impact of Frew lawsuit

The Frew lawsuit (Civil Action No. 3:93CV65 – Linda Frew, et al. [plaintiffs] v. Albert Hawkins, et al. [defendants]; Senior Judge William Wayne Justice.) resulted

from concerns that Texas children were not being adequately served by the Medicaid program. Complaints regarding transportation services in the Frew lawsuit included:

- Rides arrive at the wrong time and sometimes on the wrong day.
- Recipients sometimes have to wait a long time to be picked up.
- Trips can take much longer than they would by other means such as a personal vehicle or fixed route public transportation.
- Some health care providers will not accept Medicaid patients (or accept very few Medicaid patients) because they often show up late or miss appointments.
- Some health care providers schedule all Medicaid patients at once, double- or triple-booking appointments to avoid 'no shows.'
- Recipients sometimes have to arrive very early for appointments or stay very late after their appointments are complete.

A 1996 consent decree addressed the complaints by suggesting the following improvements to the MTP:

- Provide descriptions of the transportation program during a client's initial eligibility interview.
- Assess the program annually and implement corrective action plans to address the concerns brought about by the results of the assessments.
- Reimburse clients for mileage at the same rate as for state employees, and implement advanced payment and/or faster reimbursements.
- Train staff members to better respond to urgent requests for transportation or requests to reschedule transportation, be familiar with local resources and needs, and be knowledgeable, helpful, and polite.

The current consent decree contains 11 corrective action plans (CAPs), one of which focuses on MTP. The MTP CAP indicates how and when the evaluation of the Medicaid Transportation Program and the Medical Transportation Program should take place.

Another CAP relates to toll-free phone centers, including the MTP call centers, requiring the MTP toll-free center to comply with promptness standards within nine months of entry of the corrective action plan order. Additionally, the following items in the call center CAP would apply to MTP:

- Equipment will be adequate. Each call will be answered promptly (maximum average of 300 seconds, average monthly wait of less than 60 seconds). Fewer than 10% of calls will be abandoned. Fewer than 2% of calls will be busy or disconnected. No caller will be asked to call back.

- New, amended, and renewed service delivery contracts will include these standards.
- Within six months of entry of the order, defendants will provide quarterly toll-free number promptness reports with monthly data.
- Defendants will provide daily reports for any toll-free number that violates standards for three consecutive months.
- After two years from the entry of the order, the respective parties' counsels will confer to determine what further action, if any, is required.

On April 27, 2007, Senior Judge William Wayne Justice issued Corrective Action Orders regarding both the transportation program and the toll-free lines. The HHSC web site states that a proposed settlement to the Frew lawsuit has been filed in federal court. The federal court has ordered that the full text of the settlement, including 11 corrective action plans, be posted on the Texas Health and Human Services web site by June 1, 2007, and notices asking for comment about the settlement will be posted in all HHSC eligibility offices. Information about the settlement will be included in the June mailing to people with Medicaid coverage. Comments about the settlement will be heard in a federal court hearing at 10 a.m. July 9, 2007 in Austin.

The costs impacts and expectations of the Texas MTP in response to Frew are unknown. It does appear that some of the Frew requirements, such as increased education of Medicaid enrollees about services including transportation, will likely result in increased caseload and costs for the program. Of the more than $700 million in state funds (to be matched with federal financial participation) that is estimated to be needed to comply with the Frew requirements, about $7.6 million may be earmarked to address issues in the transportation CAP. It is currently unknown if these funds will cover the increased trips that are likely to result from the outreach efforts required by the lawsuit.

d. Rate schedule

Many providers believe that the current rate schedule does not provide adequate reimbursement for the level of activity required. The primary complaint is the no-show rate, for which providers are not reimbursed under the current contract. Because of the degree of concern about the costs of providing services, often long-distance trips, that are not reimbursed, it is likely that future rate adjustments will more accurately reflect this cost to providers, which seems to have been underestimated in the 2006 contracts.

There are also other potential cost drivers, including:

- 'Post' contracting changes such as policy changes regarding medical control authorities (MCAs) that often require that providers transport clients outside of their established region have had an impact on the actual per ride cost due to both the cost of providing a long distance ride and the lost opportunity cost of dedicating a vehicle for large parts of or a whole day.

- The cost of fuel according to the Petroleum Price Index (PPI) may be adjusted in June of this year. Given the recent spike in cost, speculation is that the PPI increase could be as high as 18 -20%. The current TxDOT contract accommodates the PPI increase.
- The estimated ride volumes that the providers bid on in response to the RFP were understated. Now that the provider community has begun to develop its own history, the next contract round will reflect this higher rider volume. Further outreach requirements required under Frew and also required under state plan amendments that would allow the state to pursue cost containment best practice avenues will likely increase overall MTP caseload and ridership.
- Other market costs such as minimum wage increases will also affect the per ride cost and will be reflected in higher cost to deliver the service in the next contract cycle.

G. Recommendations

This section presents our go-forward recommendations for providing medical transportation services in Texas. These recommendations were developed based upon evaluation criteria established during the risk assessment phase of the audit and discussions with the stakeholder group. Each recommendation was appraised against a set of criteria that indicated its impact to TxDOT's mission, scope, and function as well as the impact to its customers and partners. The evaluation criterion included:

- Cost—relative financial costs and benefits, as well as financial risk (e.g., federal financial participation).
- Long term stability/sustainability.
- Level of service to clients—impact on customer experience.
- Impact on providers —workload.
- Applicability of peer states best practices.
- Applicability of industry best practices.
- Training, skills, knowledge, and abilities of staff.
- Legal and statutory constraints/considerations.
- Use of technology (i.e. GPS, card swipe technology, etc).

Based on our analysis, Dye Management Group, Inc. recommends that TxDOT focus on three areas: program governance, logistical and operational issues, and cost-containment.

The following recommendations, grouped by area, should be implemented as soon as possible in order to mitigate the cost impact of anticipated program growth and current financial challenges. The recommended timelines for implementing these recommendations are shown in Exhibit VIII-7 below. Each specific recommendation is then described in further detail below.

Exhibit VIII-7: Medical Transportation Program Recommendations Timeline Chart

Recommendation	Within 12 Months	Within 24 Months
Governance		
Though SB10 has prohibited using TxDOT as the state's broker, the state should reconsider this legislation during the next legislative session and consider using TxDOT's transportation expertise while still complying with federal oversight requirements		✓
Create a formal stakeholder/agency working group	✓	
Logistical/Operational		
TxDOT should adjust program operations to address issues identified in interviews and stakeholder meetings	✓	
TxDOT should explore a process for evaluating the impact of Frew compliance (i.e. 90 second hold times) on the quality of call center services	✓	
Develop protocols for the appropriate escalation of call center calls	✓	
Implement a formal and automated issue resolution process and system	✓	
Use the Frew settlement as an opportunity to clarify policy issues left pending or on hold that could improve operational efficiency and processes	✓	
Cost Containment		
Resolve the federal reimbursement disallowance issue using options available under an approved state plan amendment or through the DRA so that the maximum federal reimbursement can be reinstated	✓	
Develop realistic funding projections that take into account the additional cost drivers identified		✓
Consider different service delivery models and reimbursement models. As part of this evaluation, TxDOT should implement a capitated broker model pilot in at least one large, urban county		✓
Consider implementing readily available technology such as smart or swipe cards and GPS		✓

Governance

1. The state should consider revisiting SB10 provisions prohibiting TxDOT acting as the MTP broker for the state during the next legislative session

Considerable opportunity exists for the state to leverage the program and transportation expertise available at TxDOT. TxDOT's contracting and operational strengths also make it an ideal partner for the Medicaid program in delivering transportation services to eligible clients. The infrastructure and efficiencies that TxDOT has begun to gain for the program should be continued.

2. Create a formal stakeholder/agency working group

TxDOT or its successor in managing the program should create an advisory panel or ideally, a formal, acting work group (composed of members similar to the stakeholder work group used for this study) to work with the administering agency in providing guidance and input on program operations. This group's membership should be expanded to include Medicaid policy representatives. The group should meet regularly to sort out policy and operational issues. This formal working group could ensure that:

- To the extent possible, transportation and medical policy parallel one another (i.e. managed care's 24 hour rule versus MTP's 48 hour rule, etc.).
- Best industry practice ideas and solutions are shared among the group to ensure that the program stays abreast of trends and opportunities being explored or utilized by other states.
- Other cost effective approaches are explored and possibly implemented. This could include educating the transit provider community, (much as the Medicaid program has done with prescribing physicians to contain drug expenditures), regarding better care coordination in transporting those who may or may not need wheelchairs or stretchers; or a prior authorization approach, like that used with other medical services could be a legitimate and practical way to assist with containing costs.

Logistical and Operational

3. TxDOT should adjust program operations to address issues identified in interviews and stakeholder meetings

Through the formal stakeholder/agency working group identified above further clarification of issues identified in this study should be explored along with seeking out other relevant challenges. Among these involves the contracting process put in

place in 2006 which may need adjustments to account for realistic administration and program specific challenges. Additional areas that may need clarification and review include time periods for background checks on DUI violations, 'failed driving history' and the requirement that a provider have no pending lawsuits.

The manifest that is downloaded electronically by the providers has a number or areas that need refinement or education to ensure delivery of NEMT to potential clients. The accuracy and completeness of information which is given on the manifest affects the provider's ability to contact and locate the client, which impacts transportation services. TxDOT needs to develop standards and provide education to ensure that the rides scheduled are clearly communicated to the providers to improve service levels and promote consistent performance on the part of the provider.

4. TxDOT should explore a process for evaluating current policies (i.e. the maximum 90-second hold time before a client is able to talk to an intake-worker) on the quality of call center services

TxDOT needs to closely examine the impact of reduced hold time on the quality of service delivered to clients and client representatives. To improve this, the department needs to develop and adopt policies and standards that can be documented and deployed to staff in a comprehensive and consistent manner. By defining processes and promoting education of those processes TxDOT could improve call center staff performance and expertise while making it easier for providers, clients and client representatives to get fast consistent information and services on the phone, enhancing overall services.

5. Develop protocols for the appropriate escalation of call center calls to handle exceptions and give call center staff more training and tools to enhance consistency in the information provided to clients

As mentioned in Section VIII.G.4 above, standardized processes and procedures not only need to be developed and defined but disseminated to staff in a comprehensive and consistent fashion to improve call center performance. These policies need to be implemented uniformly across all the call centers and provide for ongoing training to support and augment the policies in place. This may involve providing opportunities for call center staff to discuss issues and questions that arise to keep the policies and educational outreach responsive to the needs of the program.

Part of this policy development needs to address how to handle calls that require escalation to a supervisor level to provide appropriate service. This may entail getting knowledge that is unknown to the call center staff that answers the call or may involve dealing with clients who require additional assurances. Once clear protocol is established and implemented TxDOT can improve the handling of the caller with the first staff person they encounter on the phone. If that does not resolve the caller's

issue, having a clear policy in place to handle needs for additional information will speed delivery of service and improve call center staff performance.

Another recommendation that should be investigated after policies and processes are clearly established is exploring opportunities for clients to request routine NEMT through an automated telephone system or on a web site without using the call centers. This would be especially valuable for clients with consistent repetitive transportation needs, such as dialysis patients.

6. Implement a formal and automated complaint process that tracks all complaint calls and their resolution

TxDOT needs to educate providers on their formalized issue resolution process and ensure that it accurately documents the facts, categorizes the type of issue and monitors the status of issue resolution. Although a form currently exists (Form MTP-1004) it needs to have the appropriate supporting technology to maintain the information in an electronic form, forward it to the appropriate resource for resolution and monitor the status through completion while flagging for additional management attention issues that remain open beyond appropriate timeframes.

This process should allow for issues that arise with service providers, call center staff and other related services where challenges are occurring. The process surrounding this should clearly define what happens once an issue is entered into the system and the anticipated timeframes for parties to respond once notified of an issue needing resolution. In conjunction with this TxDOT has mentioned plans at some point to develop a process for inputting complaints into TEJAS (the Transportation Electronic Journal Authorization System).

7. TxDOT, in conjunction with HHSC, should use this audit as an opportunity to clarify policy issues deliberately left pending or on hold, that could improve operational efficiency and processes

Various policies and issues have been left on hold due to pending litigation underway. Since the terms of the Frew settlement will be made available in June 2007 on the Texas Health and Human Services web site this creates an opportunity for TxDOT to use the corrective action outlined within the settlement in conjunction with this study to establish proactive policies to address operational changes that could enhance the efficiency and delivery of NEMT. TxDOT should also use this opportunity to use good public/stakeholder relationship skills to inform the public and policymakers of their steps to answer, address and conform to the terms of the settlement in creative and constructive ways.

Cost-Containment

8. Working with HHSC, assist in resolving the federal reimbursement disallowance issue using options available, an approved state plan amendment or through the DRA, so that the maximum federal reimbursement can be reinstated

TXDOT needs to continue to work proactively with HHSC to resolve the issues surrounding the federal match rate for NEMT. This is a complex issue and may require programmatic or policy adjustments to reinstate the FMAP reimbursement at the higher rate. This could also be addressed with a state plan amendment approved by CMS that allows TxDOT to keep the current arrangement for brokering services and qualify for the higher FMAP reimbursement rate. Without the higher match the resulting loss in reimbursable revenue will continue to significantly impact the bottom line of the program.

9. Develop realistic funding projections that take into account the cost drivers in the study findings

Funding projections need to be developed by HHSC that accurately reflect known factors to estimate the anticipated costs of the program. These projections need to incorporate factors such as the estimated increase in both caseload and program expenditures according to the Texas Health and Human Services Commission report in May 2007. Also, a factor is the effect of the PPI index adjustment, allowed under the current provider contract, which is likely to increase fuel reimbursements as much as 18-20% this year.

In addition to the above factors the current provider contract does not account for several factors which will result in higher cost of service with the next contract cycle.

- Some of the previous contracts allowed for providers to be compensated for client no-shows. While this was specified in the RFP and in pre-bid clarification the impact was underestimated by providers. Based on experience in this contract period, higher costs are anticipated in the future.
- Although the ride volumes were stated in the RFP they underestimated the current volume experienced by providers. This factor will likely result in increased costs in the next bid cycle.
- ‘Post’ contracting changes such as policy changes regarding the MCAs that may require that providers transport clients outside of their established region.
- Miscellaneous market costs such as minimum wage increases which will be reflected in higher costs to deliver service.

These cost drivers should be incorporated into future funding projections.

10. Evaluate different service delivery models and reimbursement models (such as capitated payments); different models could be implemented for different geographic locations

TxDOT should evaluate different service delivery models and reimbursement methodologies. This could include the application of different service delivery models in various areas of the state (i.e. possible use of a capitated broker model in urban areas but not in rural areas of the state, etc.)

As part of this evaluation, TxDOT should implement a pilot of a capitated broker model in at least one large, urban county, with a robust enough transportation infrastructure to support this approach. TxDOT could consider rolling a number of services into the pilot including the gate keeping call center function; verifying Medicaid eligibility, medical necessity and need for transportation services; outreach; provider and client education; and paying providers. Technology solutions available in the private sector that may not easily implementable or affordable for the state could also be required as part of the solution presented by respondents. Results of the pilot could be benchmarked against the existing service delivery models.

In pursuing this option, TxDOT should consider carefully constructing an RFP that could award for best value with equally weighted evaluation criteria for cost containment and maintenance of an appropriate level of quality in service delivery. Based on the experiences to date in other states, one of the disadvantages of a brokerage capitated model is that it can drive cost containment at the expense of providing quality services to clients. Further, the RFP should be drafted to ensure a competitive environment for both local and national providers. A standard set of acceptable performance measures/indicators that would objectively track whether services are deteriorating or improving should be established as part of any contract resulting from the RFP process.

11. Consider implementing readily available and affordable technology

The implementation of readily available technology such as smart cards, swipe cards and GPS could greatly enhance the documentation of provider timeliness, and rider no-shows and this could then be integrated into the billing and payment process. Additionally, MTP should explore piggy-backing onto smart card technology currently used in other health and human services programs such as the EBT card used for accessing food stamps or the MAC card, used to track possible client or provider fraud and abuse. GPS technology, now more routinely available at a reasonable cost could assist schedulers and drivers in locating clients, and could also assist with quality monitoring and documentation. Some of these technologies could be tried out in the broker pilot program described in Section VIII.G.10 above.

MTP staff has proposed the use of some of these technologies in the past and have encountered some Medicaid policy or statutory limitations. As an example, MTP has

been advised that they must get a client's actual signature on a log book versus using a swipe card. Thus, it may be necessary to work with HHSC, the federal Centers for Medicare, Medicaid Services (CMS), and/or the Texas Legislature in some cases to adjust policies and/or statutes to facilitate greater use of these technologies. Use of these technologies can provide a significant return on investment in terms of improving the overall efficiency and effectiveness of the operation of MTP.

In conclusion, the recommendations for the Texas MTP should be implemented within the next 12 to 24 months. Issues surrounding funding clearly must take priority. Likewise, the operational focus that TxDOT has brought to the program should be continued in order to ensure that the program reaches its goals and continues to achieve efficiencies through innovation and robust contract management while maintaining client service levels. While the Frew lawsuit has been pending it has caused the resolution of some operational issues to be deferred. The pending settlement provides both TxDOT and HHSC significant opportunity. With parameters more clearly established, every day policy and operational issues can now be clarified. Those areas with room for improvement can then be tackled within the lawsuit settlement guidelines.

The application of some national best practices may also provide opportunities for MTP. These opportunities are particularly crucial to the state as the MTP program faces certain growth, both in client participation and in overall cost. Options to contain cost and leverage transportation infrastructure efficiencies and operational efficiencies gained from technology will allow MTP to provide quality service levels at a cost that remains affordable or at least reasonable for the state.

Finally, the state has a great opportunity to use the federal flexibility available in the DRA to pilot best practice arrangements identified in this report. The use of good pubic relations as all of these steps are undertaken could be a tremendous positive influence on public opinions and assist to repair some of the damage done through past litigation as well as smooth the way toward implementing proactive changes in the program. The contract and broker model TxDOT has put in place provides a strong template for a future program and implement initiatives that will help to contain costs as this program continues to experience certain growth.

IX. Study Area #8: Opportunities for Improving the Overall Efficiency and Effectiveness of the Outdoor Advertising Control Function

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TxDOT's Right of Way Division is responsible for implementing the Outdoor Advertising Control Program (OACP). During the initial risk assessment process, the audit team identified and documented six risks related to various aspects of the TxDOT OACP. Two risk topics were selected for further study based on the potential that further assessment could assist in determining whether the program is or could be enhanced to operate as a revenue neutral program. The risks selected were:

- **OAC1**: Uncertainty as to whether outdoor advertising control is a revenue neutral program (from the perspective of developing a current baseline for analysis purposes).
- **OAC2:** Opportunities to obtain cost efficiencies and improve service levels through automation, privatization, and/or other alternative service delivery mechanisms.

These risks required a detailed look at the activities of the Right of Way Division as it relates to the Outdoor Advertising Control Program and the field support services provided in the district offices that administer the OACP. In particular, the study team evaluated the revenue generated and operating costs incurred to implement the regulatory requirements relating to the outdoor advertising industry. Based on this analysis, the team identified a number of issues and opportunities with the current OACP and developed a number of recommendations, which could improve the overall efficiency and effectiveness of TxDOT's OACP and help to allow the program to operate on a revenue neutral basis.

A. Summary of Findings and Recommendations

The Dye Management Group, Inc. audit team conducted an in-depth review of the Right of Way Division's Property Management Section and the related district based operations supporting the implementation of the Outdoor Advertising Control Program (OACP).

A stakeholder group consisting of TxDOT staff from the Right of Way Division along with industry and other interested external stakeholders was assembled to provide guidance and input to the audit team and to review audit findings. The audit team found that the Right of Way Division as well as the other stakeholders were very cooperative in sharing information about the program and consistently found additional information as requested by the team.

The stakeholder group reached a consensus opinion that the audit findings regarding the functions and procedures currently in place were accurately portrayed and that the audit

team had identified the pertinent issues regarding the operation of the Outdoor Advertising Control Program in Texas. These key findings are presented in detail in the following pages but are generally summarized as follows:

- TxDOT's Outdoor Advertising Control Program has a number of challenges created by the following factors:
  - The size of the state and the amount of road mileage subject to control is considerably larger than peer states.
  - The number of district offices and the prevalence of part time OACP positions in the districts.
  - The number of certified cities, some administering their own program.
  - The need to operate dual programs in the federal Highway Beautification Act (HBA) program and the state's own rural roads program which have similar objectives but different rules.
- TxDOT's OACP is not currently revenue neutral. In FY 2007, the OACP is estimated to have a deficit of approximately $492,400. At the current operational approach and fee structure, this deficit position will continue to get larger, reaching approximately $795,020 in FY 2012.
- TxDOT's OACP has a number of operational inefficiencies resulting from:
  - Distribution of program functions across headquarters and the districts.
  - Lack of consistency in processing permit applications and renewals between districts.
  - Limited use of automation.
  - Use of monthly renewal cycles.
- There are currently no statewide standards for mapping and identifying roads subject to control.
- Statewide sign inventories are not up to date; some districts have not updated their inventories since before 2000.
- Equipment for locating and measuring signs is not standardized or in place to support consistency in field activities.
- The current license fee structure lacks equity with a similar license fee for small businesses that own one or two signs advertising their own business and an outdoor advertising firm with hundreds of signs across the state.
- The current permit fee structure also lacks equity and is not consistent with national

best practices. TxDOT's current permitting fees are fixed and based on a single site whereas best practices findings would indicate that square footage of the sign, number of faces, and the applicable control system should be taken into account when assessing outdoor advertising permit fees.

- Programmatic information is not shared via the Internet with the regulated industry or the public.

Based on these findings, the study team has developed a number of recommendations for consideration by TxDOT. These recommendations are presented in detail in the following pages but are generally summarized as follows:

- TxDOT should update the statewide inventory of permitted signs using standardized equipment to record GPS location, size lighting and spacing, and digital imaging as soon as possible. An updated inventory is an essential building block for addressing most if not all of the identified issues and many of the other recommendations. One approach could be to finish the planned five district pilot and integrate the lessons learned into a statewide effort. The audit team feels that the cost to delay completion of the statewide inventory outweighs the benefits of doing the pilot first. In addition, the vehicle in place was written so that it could be expanded, at state option, to the entire state without being re-bid. To this end, we strongly recommend that TxDOT not wait for completion of the pilot effort, but move forward with a statewide inventory effort now, either by expanding the pilot or through a separate statewide procurement.
- TxDOT should centralize the existing permitting process. This would include establishing a centralized mail drop, defining a protocol for identifying the order of submissions, and setting standards for application review to provide a 5-day notice on acceptability and approvals within 30 days.
- The department should develop a centrally controlled field review function to evaluate permit applications, sign erections, and evaluation of identified problems. This work would be performed by a small OACP focused team reporting to the Right of Way Division and deployed regionally. This would take the place of the work currently being performed by resources in each district.

  In arriving at this recommendation, the study team analyzed three alternative approaches. This included the current status quo in which the application review work is performed in the districts, a centralized team reporting to the Right of Way Division and deployed regionally, and the outsourcing of this function. The study team determined that a centralized in-house approach in which staff is deployed regionally is more efficient and effective than the current district-based approach. A centralized approach would require eight FTEs versus the 19.45 FTEs currently allocated to OACP statewide. A centralized approach also provides for greater standardization and consistency in the application process. It would also allow the district staff currently working on OACP on a part-time basis to better focus on other project specific right of way activities. Our analysis indicated that there was no cost savings if this function was privatized, with the cost to privatize the application review process approximately $850,000 higher than the cost of implementing the regionally deployed in-house

model. In addition, the application process is somewhat regulatory in nature and thus may be more appropriate to perform with in-house resources.

- TxDOT should centralize and automate the billing process for all renewals. It should also provide for annual set-date billings and allow for multi-year renewals at the option of the industry.
- TxDOT should seek statutory revision to either eliminate or revise the current license requirements. At a minimum, TxDOT should seek the repeal of the surety bond requirements and should by rule adopt a graduated scale for licenses based on the number of counties and the size of sign inventory.
- TxDOT should modify its permit fee schedule based on the updated inventory data and license fee status to move toward a revenue neutral program. In doing so, the department should consider a fee structure which accounts for variation in sign installation and allows for and includes a fee for sign modifications. While this will increase the complexity of fees for both TxDOT and sign owners, a comprehensive current inventory should minimize the administrative aspect of this approach. Not using a graduated fee structure for permit renewals does not reflect best practices found in other states and unfairly penalizes the smaller sign owners in the state.
- TxDOT should provide Internet-based access to OACP information including sign inventory data and self-service-capabilities such as application tracking and online invoicing and payment processing for the industry.
- TxDOT should incorporate an OACP layer in the TxDOT GIS to cover control routes and sign locations.
- The department should implement an improved cost accounting and business modeling methodology for the OACP and utilize this model to monitor costs related to program operations on an ongoing basis.

By implementing these recommendations, the audit team estimates that the program will move from its current annual deficit position to an annual surplus of approximately $214,000 by FY 2010. Over the five year period, the program would have an anticipated cumulative deficit of $4,024,871 under the proposed operating model versus a cumulative deficit of $3,826,911 under the status quo operating model. The primary reason for the larger cumulative deficit under the revised operating model is the result of the one-time investment in completing the initial statewide inventory, automating the billing system, Web-enabling the OACP data, providing self-service capabilities for the industry, and providing new equipment and training for the internal regionalized review team. These one-time capital costs are approximately $2,610,000.

In terms of impacts on TxDOT staffing, it is anticipated that these recommendations would be FTE neutral. This is based on the assumption that full-time FTE positions in a district are candidates for re-direction and that positions which are only partially dedicated to outdoor advertising will have the newly available time redirected into other activities within the district. Based on this assumption, there would be 11.0 FTE positions available from districts where at least 1.0 FTEs was reported as being dedicated to OACP. This savings

offsets the total of 11.0 FTE positions utilized in the new centralized OACP functions between the internal review team and the centralized billing functions.

The remainder of this chapter describes our analysis of this study area in more detail. It includes an overview of TxDOT's OACP, a review of the risks included in the study area for further analysis, and a discussion of the audit analysis approach for this study area. It also includes a review of best management practices and a summary of program activities by peer states, a summary of key findings, and a detailed discussion of recommended actions. Finally, we outline the potential impact of the proposed recommendations on the financial position of the OACP and on opportunities for headcount redirection.

B. Program Overview

Various elements of outdoor advertising control within the State of Texas are currently managed under the direction of the Right of Way Division with operational support from staff in the right of way function in each district to administer the program at the local level. This section provides a brief history of the Outdoor Advertising Control Program (OACP), both nationally and in Texas. It also includes an overview of the current division of responsibility between the headquarters and district right of way staff involved. Separate subsections are included to discuss both the licensing and permitting aspects of this program.

1. Overview of the Outdoor Advertising Control Program

The provisions of the Highway Beautification Act (HBA) of 1965, as amended, guide the administration of the outdoor advertising control program. The HBA provides that construction and maintenance of outdoor advertising signs, displays, and devices, be controlled by the states adjacent to the Interstate System, the primary system as it existed on June 1, 1991, and other roads designated as part of the National Highway System. Essentially, the act provided that along the highway systems subject to control outdoor advertising should be restricted to areas that are zoned, or meet criteria, and appear to be commercial or industrial zones. The control was initiated in order to protect the public investment in such highways to promote the safety and recreational value of public travel and to preserve natural beauty. A related program covering Texas rural roads was codified at the state level under Texas Transportation Code, Chapter 394 in September 1995.

In Texas, both the primary system (HBA) and the rural roads programs operate on a similar but not identical set of procedures. The HBA program requires licensing of sign owners and permits for each sign location. The rural roads program requires no licensing of the sign owner, but does require a sign permit for each sign location. Slight differences exist between the two programs regarding the criteria applied to identify acceptable sign locations. Fees for permits and field work related to both programs are otherwise similar.

The HBA legislation allowed each state to select the criteria for defining commercial or industrial areas where no zoning exists. In addition the legislation provided each state the flexibility to establish size, lighting, and spacing criteria which was to be defined and agreed to by the Federal Highway Administration (FHWA) in a state/federal agreement. In 1972, the Texas Legislature enacted the Texas Highway Beautification Act to comply with the HBA. The state act was later codified and is currently contained in Chapter 391 of the Transportation Code.

On May 2, 1972 the State of Texas and the federal government entered into the required agreement that defines an un-zoned commercial or industrial area as being within 800 feet of one or more recognized commercial or industrial activities, subject to certain exceptions. Further, the state agreed to exercise effective control by regulating the size, lighting, and spacing of the billboards in those areas. As part of the agreement and the legislation the state can discharge its duty of effective control by certifying that local governmental units have established criteria regarding size, lighting, and spacing consistent with the purposes of the HBA. In Texas, there are currently 63 'certified cities' that operate their own programs to implement the intent of the HBA. The state program does not apply to signs within those cities corporate limits. However, for sign control within the corporate limits of certified cities, TxDOT does still have a stewardship role to assure that each of the cities certified is meeting its obligation to meet or exceed the control standards required by the federal HBA program.

Since Texas law only permits zoning within incorporated cities, the only place where zoning is used under the TxDOT HBA program is where roads subject to control pass through the corporate limits of cities that have not applied or been certified by the state to run their own outdoor advertising control program. The remaining roads throughout the state must rely on the un-zoned criteria based on recognized commercial or industrial activity.

As part of the original federal legislation once the criteria was adopted, the states were expected to develop an inventory of existing signs and identify those that did not conform to the zoning or size, lighting, and spacing standards adopted by the state. These non-conforming signs under the federal law were supposed to be acquired and removed but funding commitments, at both the federal and state level, were never sufficient to cover the acquisition costs. Therefore, today some 40 years after the original legislation, non-conforming signs remain in the state's sign inventory. These signs have been allowed to remain in their pre-existing legal location for the duration of their life subject to customary maintenance.

TxDOT's Right of Way Division was given the responsibility to implement the HBA state/federal agreement and the Texas legislation. The implementing rules are contained in Title 43, Chapter 21 *Right of Way* of the Texas Administrative Code. Subchapter I covers the HBA related rules and Subchapter K contains the rural road program rules. The program is assigned to the Property Management Section of the Right of Way Division with four FTEs assigned to process license applications and

renewals, maintain the programs centralized database file, develop and provide training for district staff assigned to the program, and fulfill customer service requests relating to the program.

A rural roads program under Chapter 394 follows the HBA conceptually and applies to other TxDOT maintained roads that are not under control of the HBA and that lie outside of incorporated areas. Except for no license requirement and some minor definitional items, the permit process is the same.

The primary customers of the Outdoor Advertising Control Program include the outdoor advertising industry and the many local sign owners and the landowners where the signs are located. Other stakeholders include scenic interest groups like Scenic America and Scenic Texas, and the general public who monitor outdoor advertising with varying degrees of interest.

2. OACP licenses

Under Texas code each billboard owner that maintains or wishes to erect an outdoor advertising sign as defined by the law must obtain a license. The code provision both for issuing licenses and the fees to be charged are as follows.

§ 391.062. ISSUANCE AND PERIOD OF LICENSE.

(a) The commission shall issue a license to a person who:

(1) Files with the commission a completed application form within the time specified by the commission;

(2) Pays the appropriate license fee; and

(3) Files with the commission a surety bond.

(b) A license may be issued for one year or longer.

(c) At least 30 days before the date on which a person's license expires, the commission shall notify the person of the impending expiration. The notice must be in writing and sent to the person's last known address according to the records of the commission.

§ 391.063. LICENSE FEE. The commission may set the amount of a license fee according to a scale graduated by the number of units of outdoor advertising owned by a license applicant.

2007 License Fees	
Filing Fee	$125
Renewal Fee	$ 60

§ 391.064. SURETY BOND.

(a) The surety bond required of an applicant for a license under Section 391.062 must be:

(1) In the amount of $2,500 for each county in the state in which the person erects or maintains outdoor advertising; and

(2) Payable to the commission for reimbursement for removal costs of outdoor advertising that the license holder unlawfully erects or maintains.

(b) A person may not be required to provide more than $10,000 in surety bonds.

The TxDOT right of way headquarters staff is responsible for license applications and renewals throughout the state. Once a license is approved, it is established in the program office database and invoiced annually on the anniversary of the approval. The number of sign owners has remained static over the last few years with on average 100 new license applications being approved each year and 100 licenses not being renewed due to business termination or sale.

3. OACP permits

Signs maintained or to be erected by a licensed owner require a permit for each location. The code provisions relating to permits follow.

§ 391.068. ISSUANCE OF PERMIT.

(a) The commission shall issue a permit to a person with a license issued under this subchapter:

(1) Whose license application complies with rules adopted under Section 391.065; and

(2) Whose outdoor advertising, whether owned or leased, if erected would comply with this chapter and rules adopted under Section 391.032(a).

(b) The commission by rule shall prescribe:

(1) A reasonable fee for each permit;

(2) The time for and manner of applying for a permit; and

(3) The form and content of the permit application.

(c) A permit issued to regulate the erection and maintenance of outdoor advertising by a political subdivision of this state within that subdivision's jurisdiction shall be accepted in lieu of the permit required by this subchapter if the erection and maintenance of outdoor advertising complies with this subchapter and rules adopted under Section 391.032(a).

§ 391.069. FEE AMOUNTS. The license and permit fees required by this subchapter may not exceed an amount reasonably necessary to cover the administrative costs incurred to enforce this chapter.

2007 Permit Fees	
Filing Fee	$ 96
Renewal Fee	$ 40

TxDOT right of way staff in each district is responsible for permit applications and renewals throughout the state. According to headquarters staff, once a permit is approved it should be entered into the program office database and invoiced annually on the anniversary of the approval. A review of current active permit data from the state database indicated that only 14,944 active permits have been entered into the central database by the districts. There is a consensus estimate among TxDOT program specialists and external stakeholders, however, that there are about 16,000 signs within the HBA program. Thus, this would imply that not all districts have completed the process of entering the permits being monitored.

Exhibit IX-1 below indicates the number of permits currently recorded as active, the mileage subject to HBA control, a one year history indicating the number of new permit applications received and the number that were denied, and the number of certified cities in each district plus the estimated FTE being applied by each district to the OACP program.

Exhibit IX-1: OACP Staffing and Activity by District

	Estimated FTE	Controlled Mileage	Permitted Signs	Annual Permit Requests	Permit Requests Denied	Certified Cities
Abilene	0.20	850	520	19	3	1
Amarillo	0.50	1,702	712	16	7	
Atlanta	0.40	700	739	30	10	
Austin	1.50	1,400	950	57	13	1
Beaumont	0.75	1,100	507	31	7	
Brownwood	0.40	1,570	271	8	4	
Bryan	1.00	1,350	450	16	11	
Childress	0.25	524	120	3	0	
Corpus Christi	0.70	900	375	12	3	2
Dallas	1.00	1,355	943	71	48	14
El Paso	0.25	511	128	9	2	1
Fort Worth	1.00	971	575	87	24	16
Houston	3.00	675	2,080	229	26	10
Laredo	0.25	1,100	450	11	2	
Lubbock	1.00	1,000	425	22	2	1
Lufkin	0.50	698	369	25	7	
Odessa	0.50	1,000	174	5	1	2
Paris	0.50	541	300	40	5	2
Pharr	1.50	1,200	574	288	35	

	Estimated FTE	Controlled Mileage	Permitted Signs	Annual Permit Requests	Permit Requests Denied	Certified Cities
San Angelo	1.00	1,000	201	5	1	
San Antonio	1.00	1,017	1,464	28	14	8
Tyler	0.50	1,051	806	32	11	1
Waco	1.00	1,500	960	40	7	2
Wichita Falls	0.25	799	348	21	8	1
Yoakum	0.50	898	503	12	1	1
Total	19.45	25,412	14,944	1,117	252	63
Appropriated	15.00		Rejection Rate		23 %	

The district offices are responsible for the HBA Permit program and handle both new applications and renewals. Applications are processed on a first come first served basis which in some growth areas, reportedly generates high incidence of applicants competing for sign locations that become available due to new business development in an area. District personnel are responsible for reviewing the permit applications and conducting all field reviews necessary to validate whether the permit should be approved. They are also responsible for assuring that renewal payments are processed by sending renewals letters each month for permits due to expire; most of which are generated from the central database maintained by the right of way property management section at headquarters.

Currently, the FTE involved in the program exceeds the appropriated number of 15 FTE field positions. Each district has designated one or more individuals within the right of way office to be responsible for the HBA program. Some of these assignments are collateral duties to other mainstream, project centric right of way functions. Only ten of the 25 districts have full time FTE positions to address the needs of the HBA Program. Only three districts indicate more than one FTE is assigned to cover program activities.

Underlying the district-level operations is a sign inventory that according to a recent study by the University of Texas Center for Transportation Research,[20] has not been kept up to date; with only nine districts indicating their inventory had been updated since 2000. The report also pointed out that equipment using current technologies for defining locations, measuring signs, and recording digital images was lacking in almost all districts. A number of districts reported they had to rely on the maintenance units to make the verification measurements.

As an outgrowth of the University of Texas study, there is a desire to privatize the sign inventory process and the Right of Way Division is in the process of evaluating a

[20] *Options for Outsourcing Outdoor Advertising Control in Texas*, Center for Transportation Research, The University of Texas at Austin, Research Report 0-4609-1, August 2005.

proposal to conduct a pilot contract, which will cover five rural districts in the northwest section of the state. The contract will require the vendor to identify and inventory all signage, determine if the signs are properly permitted, and verify whether the signs match the documented characteristics listed on the sign's original permit. As proposed, the contract may be expanded after completing the pilot program to include investigating new sign location requests as well. It could also be expanded to complete inventories for additional districts.

At present, it is estimated that the total number of permits statewide is approaching 16,000. This figure exceeds the number of permits shown in Exhibit IX-1 which only included a count of active permits under the HBA program and did not include those permits on the rural roads program or the permits that districts had yet to add to the central database. Each permit represents a sign location managed by one of the approximately 1,200 licensed owners.

On a statewide basis, 300 additional sign permits are added each year to the total number of active permits covered by both the rural roads and HBA programs. Based on a one year survey of permit application activity, there are approximately 1,100 new permit requests filed each year statewide. Of these applications, 250 or slightly more than 20% are not approved. The approximate 850 new sign permits issued annually is offset by an approximate 550 existing permits that are not renewed each year, which is why the number of active permits only increases by 300. A small number of signs are destroyed or taken down each year and would account for some of the permits that are not renewed, but the number is reported as insignificant. With 550 permits not being renewed each year, there is both a billing and collection consideration (the owner may just have forgot to file) and a removal process (non-permitted signs are to be removed) that must be factored into the workload under the OACP. The volume of new permits that must be processed coupled with the follow-up activities (most dependant on a good recurring inventory process) is expected to continue for the foreseeable future.

C. Risk Identification and Assessment

Exhibit IX-2 provides a summary of the key risks included in this study area. A discussion of the risk factors and objectives of the analysis is then described in further detail below.

Exhibit IX-2: Summary of Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Outdoor Advertising	Uncertainty as to whether outdoor advertising control is a revenue neutral program	Medium	• Program may not actually be revenue neutral as intended due to incomplete accounting and documentation of program costs • Potential loss of revenue to TxDOT
Outdoor Advertising	Opportunities to obtain cost efficiencies and improve service levels through automation, privatization and/or other alternative service delivery mechanisms	Medium	• Opportunity for FTE redirection through improved efficiencies in program administration • Could require increase in fees to industry, though potentially justified through service improvements in fee collection / application processing

1. Uncertainty as to whether outdoor advertising control is a revenue neutral program

Based on the permit fee provisions in section 391.069 of the Texas Transportation Code and on established national best practice, the OACP is intended to be operated as a revenue neutral program. The initial permit fees and the annual renewal fees charged to outdoor advertisers are intended to fully cover the costs of executing the program including permitting, maintaining an inventory of outdoor advertising signs, and monitoring for compliance with program regulations.

While TxDOT has an accounting of the revenues generated from the Outdoor Advertising Control Program, it does not currently have a full understanding of the total costs to implement the program. This is a result of the fact that staff in some districts perform other work besides outdoor advertising control. In addition, the time of TxDOT staff is split between managing the federal program and the state program for rural roads, which is funded by the legislature, and there is not necessarily a detailed accounting of the specific time allocated to each program.

The ranking for this risk is **Medium.** The Outdoor Advertising Control Program is currently not revenue neutral. The information analyzed by the study team suggests that the OACP currently runs at a deficit in the range of $500,000 per year (refer to Section IX.F.2), with the potential for this deficit to increase annually unless steps are taken to address both the operational efficiencies and fee structures of the OACP.

2. Opportunities to obtain cost efficiencies and improve service levels through automation, privatization, and/or other alternative service delivery mechanisms

The Right of Way Division is currently initiating a pilot effort to outsource management of the inventory process in five rural districts. Based on the results of this pilot effort, there is a potential to expand this outsourcing initiative statewide. In addition, there may be other elements of the administration of the outdoor advertising program, which are candidates for either additional automation and/or some form of privatization or outsourcing. TxDOT, for example, could consider a business process outsourcing contract for management of most aspects of the program. Under this scenario, a contractor might be responsible for not only the maintenance of the actual sign inventory, but also the management of the entire business process. Such a business process outsourcing arrangement could include managing the permit application process, developing and operating a Web-based sign inventory system, maintenance of the sign inventory, operation of a Web-based application to bill and collect associated fees based on the sign inventory, and periodic inspections to monitor industry compliance.

The ranking for this risk is **Medium**. This rating is the result of the potential opportunities to drive additional cost efficiencies and improve service levels and responsiveness to stakeholders through additional automation, process improvements, and/or some form of task or process outsourcing.

D. Audit Analysis Approach

The rationale for addressing both of the risks outlined in Section IX.C above was to assess the management of the outdoor advertising control function and the current revenue and cost structure to establish a baseline for analysis and identify what changes in fee structures (if any) would be required to implement any service delivery improvements while improving the revenue neutral position of the program. In performing this analysis, the team tried to take into account the likelihood of industry acceptance of any increase in fees and the expectations of the industry for service level improvements as part of any increase.

The emphasis for this study was to evaluate options that would achieve the following objectives.

- Apply enhanced automation to the sign inventory, enforcement, and billing and collection functions.

- Identify business process outsourcing opportunities for all or some functions required by the program including development of a Web-accessible sign inventory system, maintenance of the sign inventory, management of the application process, automating the collection of renewals potentially utilizing a Web-based application for billing and collection, and periodic inspections necessary to monitor industry compliance.

To assist in our analysis of the risks related to this study area, we established a technical working-group of stakeholders to provide guidance and input to the audit team. Representatives from TxDOT management and staff responsible for the elements of the study area, and external stakeholders representing the regulated industry and scenic interest organizations with a direct interest in the study area where identified. Those participants serving as members of the OACP stakeholder group included:

- Carlton Bernhard, ROW Division, Property Management Section – Director.
- Rachel Jessen, ROW Division, Property Management Section – OACP.
- John Campbell, ROW Division – Director.
- John Wallis, TxDOT Odessa District, Right of Way.
- Roxie Foster-McKinney, TxDOT Houston District – OACP.
- Lee Vela, Clear Channel, Director of Public Affairs – Houston Division and President of Texas Outdoor Advertising Association.
- Tim Anderson, Clear Channel, Governmental & Regulatory Affair – Texas.
- Margaret Lloyd, Director, Scenic Texas.
- Marcia Bayer, FHWA Texas Division, Realty Officer.

Our audit analysis approach, executed in conjunction with this stakeholder team, consisted of the following work steps:

1. Conducting structured follow-up interviews with each of the above stakeholders to validate the risks and identify opportunities. These interviews helped to identify the organizational relationships, business practices, service performance characteristics, and operational concerns related to the OACP.

2. Reviewing existing procedures and practices particularly relating to application and renewal procedures for licenses, permits, and the field activities required to maintain inventories and conduct the field reviews necessary to process permit applications.

3. Evaluating existing management and fiscal controls within TxDOT.

4. Conducting a survey of alternative practices in use nationally by other states to implement the OACP.

5. Identifying issues with the operations of the current OACP, developing various alternatives strategies to address these issues, and conducting detailed analysis of each alternative.

6. Reviewing the results of our detailed analysis with the stakeholder working-group to ensure that the audit team's subsequent recommendations were being developed based on a set of facts upon which there was general agreement with the stakeholders.

7. Developing and documenting the recommendations within this report chapter.

In developing recommendations that could be applied to each identified issue, the overall goal of assuring revenue neutrality for the OACP was considered paramount by the study team. Some items and costs which may be associated with the recommendations were, however, not included in our analysis. This includes the potential costs to provide legal interpretation and pursue remedies for appeals of administrative determinations or take action through the courts. In addition, when litigation is required, the state code provides for recovery of all administrative and legal costs and expenses incurred to remove the advertising, including court costs and reasonable attorney's fees. This was not included in our analysis.

The study also did not include a detailed review of the administrative rules as they are applied to define how the state addresses its responsibilities under the federal/state agreement. This would include setting criteria for size, lighting and spacing, and criteria applied to identify those activities that establish an un-zoned commercial/industrial area. The rules that require interpretation may impact on program consistency, especially when the interpretations are spread among 25 field offices. Any perception that regulations are being applied inconsistently can create problems in processing permits and increase the appeal rate and amount of litigation associated with the program.

As part of the study effort, the team also intended to evaluate to the extent possible the outsourcing pilot effort underway to privatize the inventory function in five districts near the northwest corner of the state. However, the extent of this evaluation was limited due to the fact that the vendor proposals remain under review and a contract has yet to be awarded to begin performing the pilot.

E. Best Practices Survey of Other States

Since the implementation of the outdoor advertising program is a national requirement, the audit team examined how peer states organized their programs and set up their fiscal arrangements under the same federal regulations. This best practice review was focused on how programs operated in a number of states that had large decentralized programs similar to Texas.

The best practices survey focused on five areas:

- The extent to which programs in other states are revenue neutral and business

practices which may be helping to achieve this financial position.

- Operational efficiency opportunities.
- Outsourcing or other privatization of OACP functions.
- Availability of and public access to sign inventory information.
- The location of the outdoor advertising program with the state department of transportation organization.

Each of these areas is discussed in further detail below.

1. Extent to which programs in other states are revenue neutral

Achieving a revenue neutral position for a regulatory program such as the outdoor advertising control program is a best practice objective but it is not generally a requirement nationally, nor is it an achievement that many states have accomplished. A comparative analysis conducted in June 2006 by the American Association of State Highway Transportation Officials (AASHTO), based on a request from the Minnesota Department of Transportation, found that only five of 26 responding states believed their fees covered the costs of their program. Likewise, in a Scenic America survey, 37 of 44 states reported that the costs of their billboard control program exceeded their corresponding revenue from billboard permit fees by a combined total of more than $6 million, including the Texas program where the shortfall is currently estimated to be approximately $500,000.

In the June 2006 AASHTO survey, the five states reporting that their collected fees covered the costs of operating their outdoor advertising program were Florida, Minnesota, North Carolina, Ohio, and Oregon. The study team reviewed the fee structures and billing practices of these states in further detail. The key practices noted in these states are outlined below:

- Not all of these states require a business license. Only Florida in the above mentioned group of five states required a license and that was $300 annually. A few of the other states covered by the survey required licenses and for most the fees ranged from a few hundred to over a thousand dollars annually. Some states indicated their fees were graduated.
- Permit fees were linked to the type of sign installation planned or erected. Most used a graduated scale based either on total square footage of signs attached to a structure or had fees to provide for a single face or multiple face installation. Florida requires a permit for each sign face.
- Each of the five states listed above provided for annualized billings for renewals using a specified due date. New permit applications were generally prorated but not in all cases. For those states that did not prorate the initial application fee, any approved permit would still be billed prior to the state selected due date.

- Ohio provides an option to make biennial renewal payments.
- For most states, billing statements are issued to each sign owner based on the number of outstanding permits held.

2. Operational efficiencies opportunities in outdoor advertising control programs

The FHWA and the National Alliance of Highway Beautification Agencies (NAHBA) have online resources available that provided some insight into potential operational efficiency opportunities for outdoor advertising control programs. Based on a domestic scan report by FHWA and presentations made over the last several years regarding the best practices needed to implement an effective program, the following items stand out as essential elements for operating an OACP:

- The state's data system should be Web-accessible by the regulators, industry, and the public in an easily understood format employing GPS locations, linked to GIS systems, and providing digital images of permitted signs.
- Inventories should be updated on a defined and reliable timeline with a biennial update preferred.
- Permit fees should recognize the variation in sign installation. At a minimum, single and multiple face installation fees should be applied but use of fees based on total installed square footage could also be applied.
- Maintenance or upgrade fees relating to changing structures or adjusting sign characteristics are an appropriate option if the change has an impact on the renewal fee where sign rates are set using a graduated schedule.
- Application processing needs to be centralized and reflect use of appropriate timelines such as:
  - Return incomplete applications promptly (several states specify five days for this step).
  - Provide decisions within 30 days.
- Assign field activity to the appropriate section within the organization to limit operational overhead and avoid workload or performance conflicts.
- Billing procedures for renewals should be automated and handled centrally with consideration for use of Web-based collection procedures and biennial payment options.

3. Outsourcing or other privatization of OACP functions

The 2005 study conducted for TxDOT by the University of Texas Center for Transportation Research on options for privatizing outdoor advertising functions used

information on outsourcing arrangements implemented by Florida, Oklahoma, and Michigan, and considered by Georgia (never implemented). Arizona and Mississippi are the only other states the audit team found that had used privatization strategies although some such as Wisconsin had considered doing so. Mississippi, for example, has recently contracted with Smart Data Strategies, Inc. (SDS) to develop a GIS system that will entail scanning and organizing some 78,000 documents, inventorying approximately 8,000 signs over 7000 miles, and developing an outdoor advertising database that will provide mapped access to data via a public Web portal.

4. Availability of and public access to sign inventory information

Only a few states provide access to database information on outdoor advertising signs. The more normal use of the Internet for the outdoor advertising program is to provide access to guidance materials and application forms. While access to state maps is found on many state sites including access to county maps with functional classification of routes, there are none that we found that display the roads subject to the state's outdoor advertising control program. For many states, the mapping relevant to the outdoor advertising program remains on paper, filed within state offices at either a headquarters or field location.

States such as Florida that provide open access to their program information via the Web have generally outsourced the inventory and data development work. The Florida data web site at http://www2.dot.state.fl.us/RightOfWay/dbhome.asp enables users to search the Florida Department of Transportation Outdoor Advertising Inventory Management System (ODAIMS) database of outdoor advertising permits through the Internet. The search can be refined by county, road, highway section, ownership, or permit number and is openly available. In South Carolina, access to outdoor advertising permit information is available online to sign owners and requires a user ID and password. The system is primarily designed so that owners can track the processing of permit applications.

5. The location of the outdoor advertising program within the state department of transportation organization

Nationally the responsibility for the program, while predominantly assigned to the right of way section, is also assigned to maintenance, environment, contracts, or traffic operations in other states. In one state over a 15 year span, the program was managed from within the Right of Way, Maintenance, and Environment Divisions. Although the majority of states operate the program within right of way, that positioning was more relevant at the early stages of the program when the focus was on the acquisition process to acquire and remove non-conforming signs. Since funding and commitment for pursuing acquisition has been limited, many of the states have repositioned responsibility to be more closely linked with the control aspect of the program. This reflects the increased field activity requirements for inventory, site evaluations

associated with sign permit requests, and routine route inspections that must be accomplished to administer this program.

F. Key Findings

This section summarizes the audit team's key findings as a result of its detailed analysis of the two risks identified included in this study area.

1. The Outdoor Advertising Control Program (OACP) has a number of challenges created by the following factors:

- **The size of the state and the amount of road mileage subject to control in comparison with peer states**

The size of the program in Texas and the distribution of rural versus urban roads is shown in Exhibit IX-3 below. The table illustrates the road mileage subject to control under HBA within Texas as compared to several other states based solely on Interstate and NHS mileage within each state as taken from the Bureau of Transportation Statistics Annual Report.

Exhibit IX-3 – Comparison of Road Mileage Subject to HBA between Texas and Peer States

State	2006 - Highway System Mileage				
	Interstate	NHS	Distribution		Total
			Rural	Urban	
Texas	3,233	10,178	8,669	4,740	13,409
California	2,460	5,180	4,854	2,786	7,640
Illinois	2,169	3,540	3,229	2,480	5,709
Ohio	1,574	2,848	2,349	2,078	4,422
Florida	1,471	2,891	2,258	2,104	4,362

The above totals in Exhibit IX-3 do not include the controlled mileage along the old primary system as it existed on June 1, 1991 which is still included under the federal HBA, nor does it include the state rural road controlled mileage. Mileage within the corporate limits of the 63 certified cities within Texas are included in the above

figures for Texas even though that portion of the above mileage is not currently included within the TxDOT permit and inventory system.

A potentially more accurate picture of the magnitude of the Texas program lies in the mileage and sign information provided by each district that reported a total of 25,412 miles subject to control. The difference between the total reported by the districts and the information in Exhibit IX-3 reflects the impact of the old primary routes and perhaps the rural road mileage where advertising controls apply.

The relevance of the large amount of control mileage is the extended distances that must be traveled to conduct inventories or evaluate sign permit applications. Even with staff located in 25 district offices there are reported to be situations where inspections could require more than a 200 mile one way trip to reach a sign location. This one factor is the most significant contributor to delays in processing applications, namely a need to package field reviews with other work activity to avoid the deadhead travel involved. This leads to a need to identify alternatives to reduce the incidence of long run trips in order to conduct field inspections related to the sign program.

- **Number of district offices and the prevalence of part time positions in the districts**

As shown in Exhibit IX-1 in Section IX.B, only 10 of the 25 districts have one FTE or more to handle the HBA functions that relate to permit applications and renewals. This means that other district priorities are often in competition with HBA needs for permit application review, application approval, and permit renewal activities.

- **Certified cities and local zoning**

As also shown in Exhibit IX-1 in Section IX.B, there are 63 certified cities within Texas. Under the provisions of the federal regulations in 23 CFR 750.706(c), TxDOT has notified FHWA that these cities have been certified and accepted to apply their own zoning controls to meet the HBA requirements for controlling outdoor advertising. TxDOT has an oversight role with these cities to ensure that they meet the HBA objectives. The number of permitted signs and the criteria applied within these jurisdictions is not captured in the statewide inventory as the local controls have been accepted. Sign locations within certified cities are generally not a problem, but sign location in the extraterritorial jurisdiction surrounding growing cities has fostered some controversy where there have been adjudicated rulings that affect signs outside of their city limits; affecting single or multiple signs differently than others under standard TxDOT OACP control. For the more than 300 other cities within Texas that have not been certified, the administration of the OACP within their corporate limits is retained by TxDOT.

- **Dual programs with similar objectives but different rules**

The HBA provided that highway systems subject to control outdoor advertising should be restricted to areas that are zoned commercial or industrial, or are located within areas that exhibit commercial or industrial characteristics based on state established

criteria. The State of Texas allows zoning only within the boundaries of cities. When a controlled road passes through a city that has not been certified to run its own outdoor advertising control program, the zoning criteria of the city must also be satisfied before a permit can be issued. All other roads in the state must rely on the un-zoned criteria based on recognized commercial or industrial activity in the vicinity.

2. License and permit fees do not cover current program costs

As illustrated in Exhibit IX-4, the license and permit fees do not cover current program costs. In FY 2007, license revenue and permit fees are expected to generate approximately $820,000. The costs to manage the program are estimated to be about $1.3 million. FTE costs, including benefits, are the major costs incurred to manage the program. Based on figures provided by TxDOT's OACP program office, the total personnel costs related to the program in FY 2006 were approximately $1.2 million. There is also approximately $50,000 of additional miscellaneous cost items. This results in a deficit for the OACP of approximately $492,400.

Under the current license and permit fee structure and assuming continued program growth and annual cost increases of 5% per year, this deficit position will continue to get larger, reaching approximately $795,020 in FY 2012.

Exhibit IX-4: OACP Status Quo and Projected Financial Position Based on Existing Fee Structures and Operational Model

		2007	2008	2009	2010	2011	2012
Licensing							
# of Licences renewed/year	100 don't	1200	1200	1200	1200	1200	1200
Renewal License Fee	renew	$60	$60	$60	$60	$60	$60
# of New Licences		100	100	100	100	100	100
New License Fee		$125	$125	$125	$125	$125	$125
Revenue from Licensing		$84,500	$84,500	$84,500	$84,500	$84,500	$84,500
Permits							
# of Permits renewed/year	550 don't	15750	16050	16350	16650	16950	17250
Renewal Permit Fee	renew	$40	$40	$40	$40	$40	$40
New Permit Applications	250	1100	1100	1100	1100	1100	1100
New Permit Fee	Not Approved	$96	$96	$96	$96	$96	$96
Revenue from Permits		$735,600	$747,600	$759,600	$771,600	$783,600	$795,600
Total License and Permit Revenue		$820,100	$832,100	$844,100	$856,100	$868,100	$880,100
Program Staffing & Other Costs with 5% annual escalation							
Cost @ District		$892,500	$937,125	$983,981	$1,033,180	$1,084,839	$1,139,081
Cost @ HQ		$367,500	$385,875	$405,169	$425,427	$446,699	$469,033
Other Costs		$52,500	$55,125	$57,881	$60,775	$63,814	$67,005
Total Costs		$1,312,500	$1,378,125	$1,447,031	$1,519,383	$1,595,352	$1,675,120
Program Estimates		**($492,400)**	**($546,025)**	**($602,931)**	**($663,283)**	**($727,252)**	**($795,020)**
Cumulative Surplus/Deficit		**($492,400)**	**($1,038,425)**	**($1,641,356)**	**($2,304,639)**	**($3,031,891)**	**($3,826,911)**

3. TxDOT's OACP has a number of operational inefficiencies resulting from:

- **Distribution of program functions**

The distribution of program functions makes it difficult to determine the exact status of the program. Although administered separately, licensing and permitting are related functions since owners must be licensed to obtain a sign permit. Licensing applications and renewals are handled by headquarters and permits applications and renewals are handled by the districts separately but they rely on a single database to track owners and signs.

With 25 districts in charge of permits, the application of the administrative rules is unclear and not being administered consistently across the state. Training budgets, the size of the state, and travel limitations plus the demands from the collateral duties held by the staff assigned to this program in the districts make this more complicated.

- **Lack of consistency in processing permit applications and renewals**

Almost all districts indicate their normal processing time for completing the field work and decision process on a new permit application is 30 days or less. Based on the study team's review of application data, across eight districts there were 62 total applications backlogged in excess of 30 days

However, there is some lack of consistency in the processing of permit application and renewals between districts. For example, permit application procedures vary between districts. In certain districts the processing of a permit application which has missing information is put on hold to wait for more complete information from the applicant rather than returning the form as incomplete as specified by the administrative rule. Likewise, industry stakeholders expressed concern about some inconsistent interpretations across different districts.

- **Limited use of automation**

Although a central Sybase database is in place to record all permit information, the system remains incomplete and existing system functions are not consistently utilized by all districts. Designed to allow each district to manage the permits they have issued and identify those permits coming due for renewal, the districts have been slow to adopt the new technology. While some districts use the system to generate notices to sign owners of the pending anniversary dates for their permit renewals, others do not. The audit team was informed by various stakeholders that some districts do not collect renewals on a regular basis, while others take steps to ensure that permit renewals are kept current.

- **Use of monthly renewal cycles**

Renewals for both licenses and permits are processed monthly based on the anniversary date of the original application approval. These monthly anniversary periods make the fiscal collection process a year round function rather than an annual one. Likewise, there is limited automation of this process, especially for the permit renewals done in the district offices.

This monthly renewal process adds complication for the outdoor advertising industry. Many of the larger sign companies operating in several districts receive multiple bills at various times throughout the year from different TxDOT districts. These sign companies then have to repeatedly execute the monthly payment process, requiring multiple payments to different offices for license and permit renewals throughout the year. Likewise, from the TxDOT perspective, the monthly renewal cycles adds cost for additional support staff at headquarters and in the districts to record, deposit, and track these receipts on an ongoing basis.

4. Statewide standards are needed for mapping and identifying roads subject to control

Mapping of the routes subject to control is not uniformly applied across the state or easily accessible. Efforts are underway to have districts identify on state digital county maps the routes subject to control by the HBA and the rural road program but it has been a slow process and only a few districts have completed the task. The source for the primary system is reported to be kept on older maps that are retained within the district office but not always easily located.

5. Statewide sign inventories are not up to date and require updating

Inventory of erected signs along each controlled highway within many districts is not up to date. Based on analysis performed as part of the 2005 study for by the University of Texas Center for Transportation Research, less than half of the districts have updated their inventory since 2000. This is further confirmed by the number of permits shown in the database as compared to the number of reported signs throughout the state.

The outdated sign inventories and other incomplete information in the data system impacts TxDOT's ability to automate procedures for program monitoring and billing. This also limits the department's ability to administer policies effectively when all signs are not in the inventory and documented properly.

6. Equipment for locating and measuring signs is not standardized or in place to support consistency in field activities

Equipment for locating, measuring, and recording images of signs is outdated or unavailable in many field offices. The skill set for using the GPS equipment is not one

that many TxDOT personnel have been trained on; limiting the number of people who can do the field work. This also impacts the ability to assign field reviews for permit applications and inventory verifications to staff that may be closer to the site needing review.

7. The current license fee structure lacks equity

Fixed license fees based on the analysis of license holders provided is not considered to be equitable. During the audit, the team noted that although license fees are the same, the distribution of signs per owner is not uniform across the licensees. The program database contains license information on 1,121 sign owners. Of those licensees, four owners maintain 6,592 signs or 45% of the active signs in the system. At the other end of the spectrum, there are 934 owners that maintain 1,500 signs. This means that 83% of the licensed owners account for only 10% of the permitted signs in the state while less than 1% (0.004%) of the owners own 41% of the signs. In considering that a fee adjustment will be required in order to create a revenue neutral situation, TxDOT should take steps to ensure the impact of those increases should not adversely impact the localized sign owners with a limited numbers of signs.

8. The current permit fee structure lacks equity and is not consistent with national best practices

Permitting fees, which are also fixed and based on a single site, are not considered to be equitable based on national best practices. The best practices findings would indicate that square footage of the sign, number of faces, and the applicable control system should be taken into account when assessing outdoor advertising permit fees. Rural signs in Texas are often smaller and used to identify a local business and yet are assessed at the same permit rate as a large lighted sign on a major transportation corridor in the state. The audit team also found that the rural roads program includes differing spacing criteria for signs based on the size of the sign. That approach could be applied to the permit cost since the larger the sign the more distance must be provided between signs.

9. Programmatic information is not shared via the Internet with the regulated industry or the public

Currently the OACP program at TxDOT does not share any of the information contained in its database with non-staff individuals. The Sybase database which houses the information, although recently upgraded, is not Web-enabled and in addition is not accurate based on the inconsistent data entry provided across the various districts for permitting information. Lack of technical capability of the current system and issues with the currency of data make sharing the information with stakeholders and the public more difficult. However, there was great interest expressed by all members of the stakeholder team (i.e. TxDOT, industry, advocacy groups, etc.)

in more easily sharing outdoor advertising information with outside entities via the Internet. Both the state and the industry felt it would be ideal to monitor permit and license applications, and provide a way to research existing signs once the inventory was current, especially if digital images for the signs were available.

G. Recommendations

This section presents our recommendations resulting from our detailed review of the risks identified in the outdoor advertising program. These recommendations were developed based upon evaluation criteria established during the Risk Assessment phase of the audit.

Exhibit IX-5 summarizes our proposed recommendations and presents our suggested timing for implementing the proposed recommendations. Each of these recommendations is then discussed in further detail below.

Exhibit IX-5: Suggested Timeline for Proposed Recommendations

Recommendation	Within 12 months	Within 24 months	Within 36 months
Update the statewide inventory of permitted signs using standardized equipment to record GPS location, size lighting and spacing, and digital imaging		✓	
Modify permit application process by centralizing function		✓	
Develop a centralized field review function to evaluate permit applications, sign erections, and evaluation of identified problems		✓	
Automate the billing process for all renewals by centralizing the function, providing annual set-date billings and initiating multi-year renewals.		✓	
Seek statutory revision to either eliminate or revise the license requirements		✓	
Modify permit fee schedule based on updated inventory data and license fee status to move toward a revenue neutral program		✓	
Enable Web Access to OACP data and initiate on line payment capabilities			✓
Incorporate OACP layer in state GIS system to cover control routes and sign locations			✓

Recommendation	Within 12 months	Within 24 months	Within 36 months
Implement an improved cost accounting and business modeling methodology for the OACP and utilize this model to monitor costs related to program operations on an ongoing basis	✓		

1. Update the statewide inventory of permitted signs using standardized equipment to record GPS location, size lighting and spacing, and digital imaging

It is recommended by the audit team that TxDOT move forward to facilitate completion of a statewide inventory of signs that are located along all HBA and rural roads control routes. While TxDOT is currently trying to initiate a pilot in five districts, we believe that having a statewide inventory is a critical path item for addressing most, if not all of the identified issues in the OACP program. One approach could be to finish the pilot and integrate the lessons learned into a statewide effort. The audit team feels that the cost to delay completion of the statewide inventory outweighs the benefits of doing the pilot first. In addition, the procurement vehicle in place for the pilot was written so that it could be expanded, at state option, to the entire state without being re-bid. To this end, we strongly recommend that TxDOT not wait for completion of the pilot effort, but move forward with a statewide inventory effort now either by expanding the pilot effort or by initiating a separate statewide procurement.

This inventory must apply state of the art GPS location and laser sign measurement information including digital imaging. This can be built on the existing Sybase database as long as it is updated based on the following recommendation to capture the needed fields and can satisfy other technological and automated billing requirements. Based on the RFP for the pilot inventory project, the state has already identified standardized equipment. What is needed is to reprioritize the preparation of the inventory and move to accelerate completion between now and the next legislative session in 2009. While the current pilot effort under negotiation targets only five districts based on the need for a reliable statewide inventory, a new RFP should be developed and a vendor procured to conduct a statewide inventory. This RFP should include incentives to provide for early completion. In addition it is essential that steps be taken to keep the inventory current through follow on surveys at least every two years. To this end, it is suggested that the initial inventory contract be for a complete inventory and at least one update cycle.

Based on a review of costs being incurred by other states and applying our own industry experience, the audit team estimates the cost of completing the initial statewide inventory to be in the range of $2 million, with the yearly cost of

maintaining and updating this inventory in the range of $400,000 to $500,00 per year. This represents a substantial increase in the cost projected in the 2005 University of Texas study.

2. Centralize the permit application process

The study team recommends that TxDOT centralize the permit application process. The centralization of the permit review process will reduce the cost to TxDOT of processing permit applications by reducing the total number of TxDOT resources allocated to this function through the economies of scale achieved by centralization. It will also foster standardization and consistency in how the functions are performed across the state.

As shown in Exhibit IX-6 in Section H of this chapter, additional costs would be incurred to move this function to the central office, including personnel and other costs. These costs will be more than offset by the improved efficiencies.

It is envisioned that this recommendation would be accomplished by:

- Establishing a centralized mail drop.
- Setting a protocol for identifying the order in which permits applications are received.
- Setting standards for review.

Each of these steps is described briefly below.

a. Establishing a centralized mail drop

Since data entry of permits is currently performed at each district, the information is input with varying degrees of accuracy and completion. By creating a single location for all permits to be submitted to and having one central office responsible for data entry the consistency of data entry would be enhanced. This could also expedite the process of determining if a permit application meets acceptability in a consistent fashion rather that subject to interpretation by multiple individuals.

b. Setting a protocol for identifying the order in which permit applications are received

Currently permit applications are hand delivered and, subject to being complete, are approved in the order they are received. This has resulted in multiple permits requests for the same sign location differentiated only by the received stamp secured by waiting in line before business hours for the district office to open. By establishing a mail in policy of accepting permit applications, including ones that

might be received the same day, this would eliminate the need for applicants to line up to submit applications.

c. Setting standards for permit application review

Policies and standards need to be established regarding the handling and processing of permit applications. Included in this process, the establishment of a policy of what constitutes a satisfactory application in terms of information provided with the application. Applicants should be notified within five days about the acceptability of their application, and given a list of missing items or information if it is not complete. In addition all complete applications should be processed and either approved or denied within 30 days of receipt. The notification of acceptability should provide an estimate of when the permit is scheduled to be approved.

3. Develop a centralized field review function to evaluate permit applications, sign erections, and evaluation of identified problems

In conjunction with the centralized permit application process, the study team recommends that TxDOT develop a centralized field review function to evaluate permit applications, sign erections, and any other identified problems related to planned or existing signs. It is recommended that this centralized function be established in-house, with several resources deployed on a regional basis to perform the assigned activities. This centralized function would perform the work in-lieu of right of way staff in each district that currently performs this function as one of their assigned duties. This will then free-up the time of right of way staff in the district to focus on other high priority activities.

Permit applications must go through a rigorous process to ensure that the sign location meets the HBA guidelines and has the proper parties in place. This generally entails a visit to the site and requires that measurements be taken to ensure the proper distances from various road and roadside features. After an approval a follow up review within the performance period are sometimes necessary to assure proper location and size and take digital images of the completed sign structure. This process may need to be repeated periodically to ensure that the sign meets the standards and that neither the sign nor the conditions have changes to make the sign inappropriately placed. Most of these types of updates will occur during the routine inventory update process.

As part of establishing a centralized application procedure a viable field review function must be in place. The study team analyzed three options for providing this function as follows.

- Status quo approach in which the function is performed in each district.
- Regionalizing of staff under the direction of the Right of Way Division.

- Consolidation and outsourcing of this function.

The relative merits of each of these approaches are discussed briefly below, followed by a discussion of our recommended approach and the rationale for this recommendation.

a. Status quo approach in which the function is performed in each district

The first option considered was to retain the field review function within the 25 district offices. This has a built in cost to provide 25 sets of electronic equipment and the training for staff to use it. The problem the study team saw with this approach in addition to funding the equipment purchase is the continuation of the present condition where HBA staff functions are mixed with project oriented responsibilities. The training issue also remains in this scenario for both equipment use and the interpretational issues that arise from application of the rules of the HBA and rural road programs. One advantage of this approach is TxDOT's stewardship role with the certified cities. This would likely be easier to perform under this alternative given both the physical location of staff near the different cities and the potential to leverage existing relationships between district staff and staff in each of the certified cities in a given district.

It currently requires approximately 19.45 FTEs at a cost of $845,000 to manage the program at the district level. This cost would likely increase due to the need to purchase and maintain specialized equipment in each district and train one or more resources to utilize this equipment.

b. Regionalizing of staff under the direction of the Right of Way Division

A second option would be to place a number of staff at various locations in the field under the direction of the headquarters Right of Way Division staff. These positions would be full time HBA positions and would be co-located in select districts. This smaller staff size reduces both the amount of equipment needed and the training costs. It does not necessarily provide for proximity to sign locations but does assure focused and trained personnel will be involved in evaluating each proposed sign location. In terms of stewardship of certified cities, there would be an advantage of this function being provided by TxDOT staff versus a private firm, but some potential loss of synergy in not being able to fully leverage all the existing relationships between the staff in the different TxDOT districts and the various certified cities within a district. The cost of performing application reviews by regionally deployed staff is estimated to be $1,090,000 per year plus a one-time cost of $60,000 for new equipment for internal staff and training on this equipment. This cost estimate is based on the following assumptions:

- Eight resources assigned regionally and housed in various district office

facilities across the state. This staffing load was validated based on the estimated work load of 1,100 new permit applications each year. If you assume that it takes approximately one and a half days per sign to complete the inspection, including time for driving to the sign location, the inspection process and follow-up documentation and that there are approximately 240 available work days per year (considering holidays, vacation, and training), each member of the review team would be able to inspect 160 signs per year, or a total of 1,280 signs statewide. Based on a workload of approximately 1,100 signs and realizing some variability in the time required to complete the inspection based on how close the sign location is to the reviewer's office location, this comfortably leaves time each month for resolving any issues with applications that may arise, stewardship responsibilities with certified cities, training, personal leave, and other miscellaneous activities.

- Salary costs of $550,000 for the eight resources based on an average salary of $45,000 with a 125% overhead factor. In addition $100,000 was included to reimburse districts for the cost of housing the regionally deployed staff in district offices and for the cost of shared administrative support for these staff.
- Program expenses of $540,000 based on:
  - An average expense cost of $400 per sign for the 1,100 signs to be inspected for a cost of $440,000; this expense estimate is based on substantial travel by car being required for some signs and limited expenses for other signs near the staff members' assigned locations.
  - $50,000 for travel associated with stewardship of certified cities.
  - $50,000 for miscellaneous expenses.

c. Outsourced model

The third option is to follow the Florida model whereby all field review functions statewide are outsourced. In Florida, the permit review function was outsourced to the same concern that was hired to conduct Florida's inventory, although this would not necessarily have to be the case. This approach has a number of benefits including:

- Increased standardization of the application process.
- Ability to commit to turnaround times and other performance measures to the outdoor advertising industry since these performance standards can be integrated into the vendor's contract.
- Reduced equipment acquisition and training costs since the private vendor would provide this as part of the contract.

One downside of this approach could be stewardship of the certified cities since this would now be performed by contracted staff instead of by TxDOT staff, assuming this stewardship role is something that TxDOT would actually feel is appropriate to outsource given the oversight nature of this role and the potential for legal issues related to extraterritorial sign placement and other concerns. In addition, while this approach seems to work well in Florida the study team recognizes that there could be additional costs and other challenges in applying this same approach to Texas with it more expansive area and road mileage subject to control.

This outsourcing approach was explored in the 2005 University of Texas Center for Transportation Research study. In that study, the University of Texas research team questioned the cost effectiveness of a vendor having to maintain staff for four field offices and keep the staff busy with only about 900 new permit site inspections a year. The conclusion in the 2005 report was that the staff would have to be involved in other TxDOT activities to provide sufficient workload to provide for full time employment. The projections included in the analysis in this report use a new site inspection load of 1,100 per year based on more current data from the districts.

While we understand the basic premise of the 2005 report and believe that the sporadic nature of permit applications during the year does present a staffing challenge for the vendor performing the work, we do not see this as a central issue. In our view, the selected vendor would not necessarily need to establish 'four field offices' but would likely train several resources to perform this work who would work from the vendor's existing facilities at different locations across Texas and work on OACP application reviews, as well as other projects for TxDOT or other clients throughout the year based on the volumes of applications received. The key to ensuring timely review of these applications for TxDOT would be to build in strict performance standards to any outsourcing contract. Vendors proposing on this work would then need to assign/dedicate the level of staffing needed to meet this performance criterion and price their bid accordingly. In addition, we would recommend that TxDOT pursue any type of contract on a per application fee basis to provide some risk sharing between the selected vendor and the department in terms of changes in cost to deliver the services over the contract period.

The cost of performing the application reviews through a private vendor is assumed to be $1,941,250. This cost estimate is based on the following assumptions:

- Twelve hours per sign for travel, inspection, and necessary follow-up at $100 per hour for 1,100 signs per year for a cost of $1,320,000.
- One Right of Way Division FTE at $65,000 times 125% overhead for a cost of $81,250 to manage the program; this resource could also conduct

certified cities stewardship functions.

- Program expenses of $540,000 as described above.

d. Rationale for recommendation

The audit team does not believe the current district model is efficient or cost-effective. It currently requires approximately 19.45 FTEs at a cost of $845,000 to manage the program at the district level and this cost would likely increase due to the need to purchase specialized equipment in each district and train one or more resources to utilize this equipment for what is generally a very part-time responsibility. On the other hand, this function could be performed by a regionally deployed, centrally managed staff with approximately eight full-time FTEs, though there would be an increase in travel expenses under the centrally managed model.

The current district-based model also contributes to the inconsistent application of policies and procedures. Likewise, moving the program from the districts would free up the time of the right of way staff who were working part-time on OACP issues to address other priority areas.

This leaves either the option of a regionally deployed internal organization or an outsourced model. The analysis conducted by the study team suggests an eight person internal staff, deployed regionally but managed centrally is a more cost effective approach than outsourcing this function. The cost of outsourcing is approximately $850,000 more than the estimated cost of the internal approach. In addition to the cost advantages of the internal approach, the internal regionalized approach has several other advantages. This includes that fact that because there is some regulatory element to the application review function, it may be beneficial to have this review function performed by internal staff. Likewise, the stewardship responsibilities with certified cities, currently carried out by district staff, can be carried out by the regionally deployed staff.

4. Automate the billing process for all permit renewals by centralizing the function, providing annual set-date billings and initiating multi-year renewals

The study team recommends that the billing process for permits needs to be removed from the district office and centralized to facilitate consistent, timely issuing of bills and collections. In addition to making the operation centralized TxDOT should annualize the collection process to make all license and permit renewals due at the same time respectively. This may entail collection of prorated fees when a permit is approved to synchronize the renewal dates on an annual schedule which seems to be supported in the State Transportation Code. These changes should also include the ability for owners and permit holders to pay fees for multiple years if desired. The

collection of fees needs to be facilitated online to allow owners and permit holders to expedite their payment either in advance of billing or once a billing is sent. Such features could include use of electronic payments which would greatly reduce the manual processing requirement to record and deposit checks (please refer to Section IX.G.7 below).

The implementation of a centralized billing process would require modification of the recently completed Sybase database to provide for and support this automated billing capability. In addition, if any legislative changes are determined to be necessary to accommodate annualizing renewals of permits, this needs to be addressed at the next legislative session.

5. Seek statutory revision to either eliminate or revise the license requirements

The audit team recommends that TxDOT request a statute change to eliminate the licensing requirements for the HBA program. The majority of states operate their HBA programs without a dual fee structure providing for both a license and a permit. The administrative costs to monitor and collect the outdoor advertising license fees exceed the amount currently being collected. Elimination of the license requirement would alleviate the need for a recordkeeping and billing function for licenses and would free resources to concentrate on administering the much larger volume of permits managed under the HBA and rural road program.

In addition, the rural road program itself does not contain a license requirement whereas the HBA program does. This requirement for a license in the HBA program places an unfair burden on the many localized sign owners that were noted during our review of HBA program data, whose one or two signs happen to be on a road subject to control under HBA versus a road subject to control under the rural roads program.

The elimination of the licensing fee can be done with a minimal impact to the gross revenue of the program. In FY 2007, licenses generated only $84,000 in revenue. The elimination of a license fee will offset to some extent the impact of an increase in permit fees on sign owners with just one or two signs.

In the event that TxDOT encounters difficulties with policy-makers in eliminating the licensing requirement for the HBA program, it is recommended by the study team that the department at a minimum seek repeal of the surety bond requirements and adopt a graduated scale for licenses based on the number of counties in which an owner as signs and the size of the sign inventory. These two elements are discussed in further detail below.

a. Seek repeal of the surety bond requirement

If licenses continue to be required, it is recommended that the department seek a repeal of the surety bond requirement in §391.064 of the Transportation Code. The surety bond requirement in support of a license was envisioned to cover the costs associated with the removal of a sign if the owner was found to have erected it improperly. To date it has never been used to remove a sign. In addition, the bond amount of $2,500 with a maximum of $10,000 is not adequate to cover the cost of removing a sign, estimated at $10,000 to $15,000 per structure. Likewise, TxDOT staff report that the process of managing and tracking surety bonds creates a significant amount of administrative overhead for the Right of Way Division, with little apparent payback.

b. Adopt a graduated scale for licenses based on the number of counties and the size of sign inventory

The Transportation Code in §391.063 appears to give TxDOT some latitude to use a graduated scale for license fees. Based on the characteristics of the majority of license holders it does not appear equitable to make an owner obtain a license prior to erecting just one outdoor advertising device along the HBA controlled routes. Many are small business owners who are advertising their business and not selling ad space as part of an outdoor advertising business. On the other hand, a small number of sign owners have many signs that are authorized under one license.

Adopting a graduated scale that allows for higher fees for owners with multiple signs, and more opportunity for selling advertising is practiced in several of the states we reviewed. There are several ways to determine a fair fee based on volume. The fee could be a sliding scale based on the number of signs the owner has or could be based on the number of counties the signs are located in following to an extent the way the surety bond requirement was stated. This would keep from penalizing the smaller owners who only have a limited number of signs. For the truly local owners that only have five or fewer signs in one county a waiver procedure should be considered as it would cut down the administrative costs associated with tracking and processing renewals.

6. Modify the permit fee schedule based on the updated inventory data to move toward a revenue neutral program

During the development of the sign inventory and the transition to a centrally administered outsourced program, it is recommended that TxDOT closely monitor costs and revise the permit fee structure in conjunction with the license fees revision suggested in Section IX.G.5 above to cover projected administrative costs of a revised program. Since this will entail a multi-year process, TxDOT may need to consider a

staged adjustment of permit fees so that fee increases match both service improvements and the increased costs of delivering the program.

In establishing, the revised permit fee structure, it is recommended that TxDOT account for variations in sign installation (i.e. number of sign faces) and for sign modifications. Each of these elements is discussed in further detail below.

a. Account for variation in sign installation

It is not uncommon for sign owners to build signs that contain more than one advertising face. This can be accomplished by signs that change messages or by signs that have an opposing face that is visible to drivers going in each direction. Accounting for these multiple signs on a single structure can be accomplished by either setting separate fees for single and multiple message installations or using a graduated scale based on the total square foot area of signs attached to the permitted structure. While this will increase the complexity of fees for both TxDOT and sign owners, a comprehensive current inventory should minimize the administrative aspect of this approach. Not using a graduated fee structure for permit renewals does not reflect best practices found in other states and unfairly penalizes the smaller sign owners in the state.

b. Account for sign modifications

TxDOT should add a modification fee to the permit schedule for any sign installation revision that would change the fee status of the permitted sign structure.

As a natural course of maintaining a sign modifications are sometimes made to existing signs that improve the life or functionality of the structure. When a modification to a sign changes the suggested fee status of the sign owners should be responsible for paying the adjusted fee amount. In addition the audit team recommends that a modification fee be added to the permit fee schedule for any sign installation revision or upgrade that would change the fee status of the permitted sign structure. The fee would cover the added cost required to update the inventoried description and image of the sign structure and revise the billing category.

7. Provide Internet-based access to OACP information including sign inventory data and self-service-capabilities such as application tracking and online invoicing and payment processing for the industry

The study team recommends that TxDOT significantly enhance Internet-based access to OACP information. One aspect of this recommendation is provided Web-based

access to the sign inventory information. Both the industry and the public with an interest in sign control have indicated a desire that program data be readily available. This is also an advantage to the management of the program because transparency and access to information reduces the manual requests that now occupy an appreciable amount of time.

A second element of this recommendation is the implementation of a series of Web-based self-service capabilities for the industry. This could include Web-based application tracking capabilities to allow the industry to track the status of their applications online; electronic presentment of invoices; and online payment capabilities for invoices for permitting fees. The audit team understands the recommendation to initiate a Web-based application for billing and collection of fees may require policy changes for TxDOT as all funds received currently must be deposited by TxDOT Accounting.

8. Incorporate an OACP layer in the TxDOT GIS to cover control routes and sign locations

It is recommended that TxDOT incorporate an OACP layer within the TxDOT GIS environment to display control routes and sign locations. This would include the mapping of control routes for HBA and Rural Road programs and needs to be established as a data layer along with the GPS locations of inventoried signs. The information to fully populate this layer can be initially acquired as part of the development of the sign inventory, with the information captured for new signs as part of the permit review and inspection process or in the incremental updates to the sign inventory. In addition, an OACP layer will require integration with Main Street Texas and support from ISD to ensure successful completion.

9. Implement an improved cost accounting and business modeling methodology for the OACP and utilize this model to monitor costs related to program operations on an ongoing basis

It is recommended that TxDOT establish a more accurate cost accounting methodology for capturing the costs associated with the OACP. TxDOT can then use these costs to build and regularly maintain a business model for the OACP. This business model should be adjusted and revisited as required based on changes in approaches to and/or the cost of delivering program services. It can then be used as the starting point for a dialogue on potential changes in fee structures to achieve and then maintain a revenue neutral position for the program.

An initial cost model reflecting our proposed recommendations and their impact on the financial position of the OACP is presented as Exhibit IX-6 in Section H below.

It is the belief of the audit team that these recommendations taken together will improve the overall efficiency and effectiveness of the program, achieve a revenue

neutral financial position, and provide improved service to the outdoor advertising industry and other stakeholders. At the same time, however, the study team recognizes that implementing these recommendations, will require a significant financial commitment and change management effort since these recommendation will require an investment in technology and data collection, changes in legislation and a restructuring of existing staffing.

H. Impact of Recommendations

Exhibit IX-6 illustrates the anticipated impact of the study's team proposed recommendations on the OACP.

By implementing these recommendations, the audit team estimates that the program will move from its current annual deficit position to an annual surplus of approximately $214,000 by FY 2010. Over the five year period, the program would have an anticipated cumulative deficit of $4,024,871 under the proposed operating model versus a cumulative deficit of $3,826,911 under the status quo operating model illustrated in Exhibit IX-4. The primary reason for the larger cumulative deficit under the revised operating model is the result of the one-time investments in completing the initial statewide inventory, automating the billing system, Web-enabling the OACP data, providing self-service capabilities for the industry, and providing new equipment and training for the internal regionalized review team. These one-time capital costs are approximately $2,610,000.

Exhibit IX-6: Projected Financial Position of OACP Program Based on Recommendations

Outsourced Model Cost Benefit Stream							
		2007	2008	2009	2010	2011	2012
Licensing							
# of Licences renewed/year		1200	1200	1200	1200	1200	1200
Renewal License Fee		$60	$60	$60	$0	$0	$0
# of New Licences		100	100	100			
New License Fee		$125	$125	$125	$0	$0	$0
Revenue from Licensing		$84,500	$84,500	$84,500	$0	$0	$0
Permits							
# of Permits renewed/year		15750	16050	16350	16650	16950	17250
Renewal Permit Fee		$40	$40	$40	graduated	graduated	graduated
Rural Roads Permit Renewal Revenue					$104,063	$105,938	$107,813
HBA Permit Renewal Revenue					$1,998,000	$2,034,000	$2,070,000
New Permit Applications per year	1100	1100	1100	1100	1100	1100	1100
New Permit Fee		$96	$96	$96	$200	$200	$200
Revenue from New Permits					$220,000	$220,000	$220,000
Sign Modification Fee					$50	$50	$50
Revenue from Sign Modifications (10% of signs per year)					$83,250	$84,750	$86,250
Revenue from Permits		$735,600	$747,600	$759,600	$2,402,063	$2,439,938	$2,477,813
Total License and Permit Revenue		$820,100	$832,100	$844,100	$2,402,063	$2,439,938	$2,477,813
Overhead & Other Costs							
Cost @ District		$892,500	$937,125	$0	$0	$0	$0
Cost @ HQ		$367,500	$385,875	$405,169	$425,427	$446,699	$469,033
Other Costs		$52,500	$55,125	$57,881	$60,775	$63,814	$67,005

Outsourced Model Cost Benefit Stream							
		2007	2008	2009	2010	2011	2012
Cost of Recommendations							
New Statewide Sign Inventory based on 2005 report			$1,000,000	$1,000,000	$400,000	$400,000	$400,000
GPS Equipment & Training for Regional Field Review Staff				$60,000	$0	$0	$0
Regional Field Review Team including administrative support				$1,090,000	$1,144,500	$1,201,725	$1,261,811
Centralized Permit App Processing, Renewals and Billings			$0	$150,000	$157,500	$165,375	$173,644
Upgrade Billing System to annualize & handle Permits			$300,000	$0	$0	$0	$0
Upgrade Sybase DB to make web-accessible				$250,000	$0	$0	$0
Total Costs		$1,312,500	$2,678,125	$3,013,050	$2,188,203	$2,277,613	$2,371,493
Net Revenue/Deficit		**($492,400)**	**($1,846,025)**	**($2,168,950)**	**$213,860**	**$162,325**	**$106,319**
Cumulative Surplus/Deficit		**($492,400)**	**($2,338,425)**	**($4,507,375)**	**($4,293,515)**	**($4,131,190)**	**($4,024,871)**

The key assumptions of this model are as follows:

Revenue Assumptions

- Elimination of the license fee as of FY 2010 (based on legislative action that TxDOT would request during the 2009 session).
- Adjustments to the permit fees beginning in FY 2010 to collect permit fees based on a graduated fee schedule as outlined in Exhibit IX-7. For this model, we have assumed a net of 300 new permits per year (1,100 new permit applications less the 250 applications which are denied and the approximately 550 permits not currently renewed each year).

Exhibit IX-7: Potential Graduated Permit Fee Schedule

Fee Category	Fee	Estimated % of Total Program
Rural Roads (< 50 square feet)	$50	6%
Rural Roads (> 50 square feet and < 300 square feet)	$75	3%
Rural Roads (> 300 square feet)	$100	1%
HBA single face	$100	60%
HBA multi-face	$200	30%
OACP Program Total:		100%

- $200 initial permit fee beginning in 2010 for the 1,100 new permit applications per year.
- $50 sign modification fee beginning in 2010, with an assumption that 10% of the sign inventory will be modified each year.

Cost Assumptions

- Sign-inventory development and operation cost of $2 million for the initial statewide inventory effort ($1 million in FY 2008 and $1 million in FY 2009) and then $400,000 per year for maintaining the inventory.
- One-time cost to equip and train the regionalized internal application review team of $60,000.
- Annualized cost for the regionalized internal application review team as outlined in Section IX.G.3.b.
- Cost of three FTE resources for maintaining the centralized permit renewal and billing

functions in the Right of Way Division. This is estimated at $50,000 per position ($40,000 salary plus 125% overhead rate) for a total initial cost of $150,000 with a 5% annual cost escalation.

- Development and implementation of the enhanced billing system at a cost of $300,000.
- Development and implementation of Internet-based access to the sign inventory and various self-service capabilities for the industry at a cost of $250,000.

In terms of impacts on TxDOT staffing, it is anticipated that these recommendations would be FTE neutral in terms of full time FTEs dedicated to OACP as outlined in Exhibit IX-8. This is based on the assumption that full-time FTE positions in a district are candidates for re-direction and that positions which are only partially dedicated to outdoor advertising will just have the newly available time currently used for OACP functions redirected into other activities within the district. Based on this assumption, there would be 11 FTE positions available from districts where at least 1.0 FTEs was reported as being dedicated to OACP. A breakout of these positions by district is provided in Exhibit IX-9.

Exhibit IX-8: Potential Headcount Impact of Recommendations

Organization Change	FTE Impact	
Potential FTEs redirected from districts where at least 1 full FTE was reported to be performing OACP activities		(11.0)
Four regional OACP permit specialists	8.0	
Three headquarters staff to administer application process, process renewals and support billing processes	3.0	
Total FTEs for centralized functions		11.0
Net FTE Impact		0

Exhibit IX-9: Potential Headcount Redirection by District

District	Current OACP FTE	FTE Re-direction Opportunity
Austin	1.50	1.0
Bryan	1.0	1.0
Dallas	1.0	1.0
Houston	3.0	3.0
Lubbock	1.0	1.0
Pharr	1.50	1.0
San Angelo	1.0	1.0
San Antonio	1.0	1.0
Waco	1.0	1.0
Total Potential FTE Redirection		11.0

X. Study Area #9: Potential Strategies for Reducing the Elapsed Time Required to Complete Motor Vehicle Enforcement Investigations

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The Motor Vehicle Division (MVD) of TxDOT is responsible for licensing all franchised motor vehicle dealers, used vehicle dealers, new motor vehicle manufacturers, distributors, converters, representatives, lease facilitators and lessors, towable recreational dealers, and manufacturers. Within MVD, during the initial risk assessment process, the audit team identified and documented a high risk related to the time required to investigate and resolve motor vehicle dealer complaints.

To address this risk in more detail, this study area involved analyzing potential strategies for reducing the elapsed time required to complete motor vehicle enforcement investigations. It included a detailed assessment and evaluation of various alternatives for improving case throughput and the overall efficiency and effectiveness of the MVD enforcement function. Alternatives which were evaluated included expanding and reorganizing the investigation staff to be more consistent with national benchmarks, exploring the impact of having statutory authority to pursue unlicensed violators (known as curbstoners), exploring the impact of having commissioned peace officers in the investigations unit, and exploring the impact of repealing the advertising cure letter law.

In addition, the recommendations from this study area were also assessed for potential application to the Motor Carrier Division (MCD) where a similar medium risk was identified in the initial risk assessment related to delays in investigation and complaint resolution for motor carriers and vehicle storage facilities.

A. Summary of Findings and Recommendations

The Dye Management Group, Inc. audit team conducted an in-depth review of the operations of MVD's Enforcement Section. Interviews with management, staff, and external stakeholders were conducted to obtain a detailed overall interpretation of the facts and issues that were facing the employees and clients of the section. These key findings are presented in detail in the following pages but are generally summarized as follows:

- There is a significant deficiency in investigation unit staff resources that prevent the division from providing proactive services to their clients and stakeholders. The long delays in investigating and closing complaint cases, as well as not having sufficient staff to perform pre-license inspections of independent motor vehicle dealership premises at locations throughout the state, are indicative of this deficiency.

- The current ratio of investigators to licensees prevents the Enforcement Section from effectively managing caseload volumes. MVD currently manages 16,318 licensees and the Enforcement Section has a staff of 14 investigators. The licensee to investigator ratio is currently at 1,166 dealers per investigator. The average ratio for the next six largest states surveyed by the audit team combined is 216 licensees per investigator. This high investigator to dealer ratio leads to large caseload backlogs and a very high aging of cases in comparison to peer states.
- The centralized structure of MVD's investigation staff limits the depth of coverage available across the state and reduces the flexibility to be able to respond to complaints in a timely manner.
- MVD faces challenges in protecting the licensing integrity of properly licensed dealers because it lacks the authority to effectively enforce dealer licensing regulations against unlicensed dealers. MVD has the authority to pursue violations by licensees. However, there is no specific statutory authority granted to MVD to pursue a violator that is not licensed.
- TxDOT enforcement investigators often find themselves in situations that have the potential for personal risk to the employee. In addition, licensees perceive that the investigators lack the legal 'police power' authority to require compliance with rules and regulations governing their operations.
- The Advertising Cure Letter legislation prevents MVD from effectively enforcing deceptive advertising laws. Present language enables the licensee to potentially violate two separate provisions of the law each month during a twelve month period and only receive a cure letter as a warning.
- Texas is the only state of the top ten jurisdictions with a large dealer population that does not pre-inspect licensee applicants. MVD believes that pre-license inspection may reduce the number of complaints about individuals who obtain a license for purposes other than engaging in the vehicle sales business at a permanent location. However, the division has not had sufficient staff resources necessary to conduct inspections and recent efforts to outsource this function through an Invitation to Bid (ITB) resulted in a limited response from the vendor community.
- There is no completed system design for the external phase of the Licensing, Administration, Consumer Affairs, and Enforcement system (LACE) which is currently targeted for a February 2008 go-live. In addition, there are some concerns by stakeholders about the functionality and capability of the initial phase of LACE which has just been deployed.
- FTE justifications and allocations are not typically prepared at the division level based on how these FTE allocations link to a division's ability to meet their customers' service level expectations.

A stakeholders group consisting of TxDOT staff and external stakeholders from the motor vehicle licensed dealer community was convened to review audit findings and to provide guidance and input to the audit team. The stakeholder group reached a consensus opinion

that the findings gathered by the audit team accurately represented the functional processes, procedures, and pertinent issues of the Enforcement Section. Recommendations were then developed by the audit team based upon the findings and analysis. These recommendations are presented in detail in the following pages but are generally summarized as follows:

- The audit team recommends that MVD increase the case closure rate and begin to reduce the caseload backlog by enlarging and regionalizing the investigations staff. This would involve:
  - Increasing the size of the investigations staff by 22 investigators, along with companion increases in supervisory investigators, attorney and staff support for a total of 28 new positions.
  - Realigning the current staff and the proposed new staff into three regional investigative units that are deployed across the state to provide for more extensive geographic coverage.
  - Conducting a formal internal review of the organizational performance (i.e. case closure rate, case backlog and case aging, etc.) of the Enforcement Section in two years to assess any additional investment needs in this area. This time period would allow for the internal components of LACE to be fully operational and the new staff and regional organization to have begun to be institutionalized.
- The audit team recommends that TxDOT coordinate with a number of additional groups in order to expand the pre-inspection licensing services invitation list to attract a larger number of eligible responses to future Invitations to Bid (ITB). As an example, we believe that MVD should discuss their needs with the various police officer and firemen associations in Texas to identify potential candidates that may be interested in providing pre-license inspection services. These associations may have retired members that may be interested in providing these services for MVD.
- The audit team recommends that TxDOT pursue statewide anti-curbing legislation which increases the penalties for unlicensed vehicle sales, known as curbstoning, and provide statutory ability to allow MVD or other law enforcement officers to authorize removal of vehicles which are being curbstoned by an authorized towing entity.
- The audit team recommends that TxDOT request the statutory authority to hire some MVD investigators as commissioned peace officers. The audit team believes this is essential since it will increase the overall efficiency of the investigative process by providing clear authority for investigators to gather and request information, reduce the reliance on local law enforcement staff for initiating necessary enforcement actions, and improve the efficiency and effectiveness of the response to complaints by dealers and the public through a timelier resolution of cases. It can also help to provide an increased level of personal safety for investigators.
- The audit team suggests that TxDOT establish partnerships with law enforcement agencies in areas with the highest incidence of enforcement activities and utilize this as a model for rollout across the state.

- The audit team recommends that TxDOT seek repeal of Section 2301.203(c) of the Occupations Code and Rule 8.271 Title 43; Chapter 8; Subchapter H of the Texas Administrative Code to remove the advertising enforcement limitations these statutes currently impose on MVD.
- The audit team recommends that TxDOT focus on institutionalizing the internal phase of LACE; then beginning in late 2007, re-scope, re-plan, and revalidate the proposed external phase of the LACE initiative. This strategy will also ensure that the current release of the LACE software is fully functional and meeting the needs of MVD staff before taking on the additional risk and complexity of new non-TxDOT users of the system. It also will allow LACE development team members to focus on ensuring the success of the Phase I implementation, rather than having to split their efforts between production support and new development efforts.
- The audit team recommends that TxDOT design, develop, and implement a business planning methodology department-wide. This process should actively involve the customers of each function to help establish target service levels and provide for modeling of the impact of different resourcing and other investment decisions on these target service levels. It should also provide a mechanism for measuring the actual outcomes annually and a feedback process back into the annual planning process to adjust as appropriate the target service levels and resulting resourcing recommendations.

In terms of synergies between the MVD and MCD enforcement programs, we determined that the regionalized model for investigators currently used by MCD would be appropriate for MVD and have recommended the implementation of this model. We also assessed the applicability of our recommendation of making some MVD investigators peace officers to MCD's enforcement function. Discussions with MCD staff suggested that there are currently not the same issues related to licensee resistance to an MCD investigator's authority or concerns about the personal safety of investigators that are present within MVD. However, it is recommended that TxDOT continue to monitor this situation and the department may want to seek statutory authority to allow the Transportation Commission to have the authority to commission select staff within all TxDOT investigative functions as commissioned peace officers. This would allow TxDOT at a later date to commission some MCD staff as peace officers if deemed to be required without having to request additional statutory authority.

In addition, there were a number of good discussions between the MVD and MCD investigative staff participating on our stakeholder team. We believe TxDOT should establish a medium for continued dialogue and information sharing between the two investigative units. Likewise, while both units have independently addressed their current management systems and technology needs, we would encourage more discussion between the divisions in the future and efforts should be made to develop technology solutions which can meet the needs of both units (i.e. common hardware for field staff, shared development of Web-based applications for use by licensees, etc.).

The rest of this chapter describes our analysis of this study area in more detail. It includes an overview of the MVD enforcement investigations program area, a review of the risks included in the study area for further analysis, and a discussion of the audit analysis approach for this study area. It also includes a review of best management practices and a summary of program activities by peer states, a detailed discussion of the various programmatic alternatives reviewed by the audit team, a summary of key findings, and a detailed discussion of recommended actions.

B. Program Overview

TxDOT's Motor Vehicle Division (MVD) regulates the motor vehicle industry in Texas and oversees the licensing of motor vehicle dealers, enforces the vehicle inventory tax, investigates complaints, and prosecutes cases to enforce provisions of Occupations Code Chapter 2301, Transportation Code Chapter 503, and other statutes and rules governing activities of licensees. MVD also administers Texas' Lemon Law, assists consumers with warranty complaints and other problems with new vehicles, and conducts Lemon Law hearings.

One specific function of MVD was included in the scope of this study area: the enforcement and investigation of licensees. A brief synopsis of this program area is provided below including program objectives, customers, stakeholders, service delivery channels, and major trends. In addition, the team identified a cross-program risk regarding a similar function within the Motor Carrier Division's (MCD) Motor Carrier Operations Section and has evaluated common solutions between the two divisions to improve the effectiveness of the investigative functions in both areas. A brief synopsis of the program functions of the MCD Motor Carrier Operations Section has also been included.

1. MVD enforcement investigations

The Enforcement Section of MVD is responsible for responding to complaints regarding sales practices and other violations of the Texas Occupations Code, Chapter 2301 and the Texas Transportation Code. This section also brings enforcement actions against those licensees who have violated a previous order such as failing to repurchase vehicles ordered to be bought back under the Lemon Law. A small but very significant part of the Enforcement Section's role is to protect the Texas franchise dealer from overreaching business practices by the out-of-state manufacturers and distributors who often wield unfair power over a dealer in their day-to-day business.

Approximately 55% of complaints received by the Enforcement Section come directly from consumers. Thirty percent of complaints come from various agencies such as law enforcement and other state, county, or local agencies. The remaining 15% of complaints received come from licensees, mainly dealers who are seeking a level playing field and who look to MVD to make sure everyone operates their businesses according to the same rules.

The Enforcement Section's primary customers are the citizens of the State of Texas. Their primary stakeholders are the state's licensed vehicle dealers. The Enforcement Section processed 4,624 new complaints last fiscal year. To process a complaint, the Enforcement Section must thoroughly investigate all aspects of the complaint including assessing the specifics of the complaint and determining whether a provision of statute or rule was violated. During the first half of fiscal year 2006, employee attrition continued to rise and the overall number of investigators declined, driving the caseload to over 372 active cases per investigator. Eight new investigators were hired in the spring of 2006 and the section currently has 31 authorized positions including 14 investigators and 4 attorneys.

A significant technology initiative is currently underway within MVD which is anticipated to increase the effectiveness of operations across the division including the Enforcement Section. MVD has been in the process of implementing a new division-wide application. Since 1998, the Licensing, Administration, Consumer Affairs, and Enforcement system (LACE) has been delayed several times due to a number of issues including changing systems integrators twice. It is currently being completed by an in-housed managed team of TxDOT employees and contracted information technology staff resources.

The initial phase of LACE which is focused on internal operations went 'live' on May 1, 2007. A second phase which provides Web-based capability for dealers to perform a number of functions is targeted for implementation in 2008. The LACE project mission is to design, implement, and deploy automation that will enable MVD to achieve its efficiency and effectiveness goals using contemporary technology. The project management plan for LACE (v5.2) described the LACE project goals and objectives as follows:

- Improve the accuracy of data through better verification of a vehicle's make, manufacturer, year, and vehicle identification number (VIN); and a dealer and/or applicant's address, social security, and driver's license numbers.
- Open the business of the division to the public through the use of the Web, including the publication of rules, opinions and reports, and enabling external customers to submit written applications, complaints, inquiries, and payments electronically.
- Create or adapt database applications to automate tasks such as drafting reports, letters, and legal documents, and to provide management supervision tools and locate dealers geographically to determine protest areas.
- Improve document management and work flow through the use of imaging, bar code tracking, and electronic archiving.
- Obtain access to information from databases of agencies relating to the motor vehicle industry.
- Speed the response of the database by upgrading to a faster database system.

2. MCD's consumer protection programs

Consumer protection functions performed by MCD's Motor Carrier Operations Section include coordinating the statutorily mandated consumer protection program for consumers of services of household goods movers, and investigating complaints against motor carriers and vehicle storage facilities. Specific tasks performed include processing complaints, conducting investigations, and assessing administrative penalties. Customers and stakeholders of the consumer protection programs are the public and the motor carriers and vehicle storage facility operators who want to ensure a level playing field through consistent enforcement of the state's laws and regulations. Currently, there are a limited number of investigators to research complaints and limited enforcement authority to collect fines from and revoke licenses of non-compliant motor carriers and vehicle storage facility operators.

A comparative examination of the investigative functions between the Motor Carrier Division (MCD) and the Motor Vehicle Division (MVD) revealed that there were two significant differences in how the two separate investigations units approach their duties and regulatory assignments as follows:

- MCD deploys their staff regionally in Austin, Dallas/Fort Worth, Houston, and San Antonio. MVD maintains all staff centrally in Austin and the investigators travel about one week per month in the field pursuing investigation assignments. MCD investigators that are regionally deployed have a greater degree of flexibility in pursuing investigations and can easily respond to fluctuations in caseload volumes throughout the state. They also have the opportunity to develop better working relationships with local law enforcement and with their regulated clients.
- MCD's Motor Carrier Operations Section uses legal services provided by the state's Office of Attorney General when pursuing complaints and violations against motor carriers and vehicle storage facilities. MVD has their own staff attorneys to assist and guide the investigators when conducting investigations.

C. Risk Identification and Assessment

Exhibit X-1 provides a summary of the key risks included in this study area. Each risk is then described in further detail below.

Exhibit X-1: Key Risks

Functional Area	Description	Risk Ranking (High, Medium, Low)	Impact
Motor Vehicle Enforcement	Extremely long time period needed to resolve complaints	High	• Increased probability of regulatory non-compliance due to complaint resolution delays
Motor Carrier Enforcement	Delays in investigation and complaint resolution for motor carriers and vehicle storage facilities (from the perspective of transferability of recommendations in this study area)	Medium	• Increased probability of regulatory non-compliance due to complaint resolution delays

1. Extremely long duration for complaint resolution

MVD regulates 16,318 licensed dealers and its workload is driven by external factors such as complaints. In FY 2005, MVD received 5,367 written complaints but opened only 1,063 dockets (i.e. a case being recommended for potential enforcement action). In FY 2006, MVD received 4,624 complaints but opened only 800 dockets. At the close of FY 2006, there was 4,597 open investigative case files plus 2,398 case files forwarded for attorney review or docketed, for an outstanding total of 6,995 cases.

MVD is currently not able to respond to complaints in a timely and effective manner. Some consumers may wait as long as two years before their complaint is investigated. In addition, MVD is not able to be proactive in conducting investigations of suspected violators.

The ranking for this risk is **High**. Based on the number of open cases and the turnaround times for completing investigations, there is a potential for an increase in regulatory non-compliance. This non-compliance can create risks for consumers shopping at various dealers. It can also create a competitive disadvantage for other dealers who comply with regulations.

2. Delays in investigation and complaint resolution for motor carriers and vehicle storage facilities (from the perspective of transferability of recommendations from this study area to this function)

As is the case with MVD's Enforcement Section, MCD has a limited number of investigators to research the growing number of complaints against a broad spectrum of regulated entities under the scope of the Texas motor carrier regulatory program. The staffing deficit causes delays in completing investigations and pursuing enforcement actions against potentially non-compliant operators. These delays could have a number of impacts. For example, it increases the probability that Texas consumers will unknowingly contract with a non-compliant operator who may not be carrying the required insurance or using required contract provisions. Investigation delays also result in an unfair competitive advantage for the non-compliant operators who can charge more competitive rates than the operators who comply with state laws and regulations. Likewise, there could be risks to passengers when schools and churches contract unregistered charter buses. There can also be risks to the traveling public and infrastructure due to uninsured/underinsured motor carriers operating trucks on Texas' roadways.

The ranking for this risk is **Medium**. Because of the backlog in investigating and resolving complaints, there is an increased potential for consumers to contract with a household goods moving firm that is not fully complying with rules and regulations. There is also a greater potential for safety issues involving a range of entities regulated under the motor carrier program in Texas. In terms of likelihood of occurrence, MCD's limited enforcement staffing is an-ongoing problem that will likely become more significant as the population of the state continues to grow.

D. Audit Analysis Approach

To further study and analyze the risks included in this study area, we established a technical working group of stakeholders to provide guidance and input to the audit team. This stakeholder team consisted of TxDOT management and staff responsible for managing the elements of the study area and external stakeholders representing various elements of the 'public' impacted by the study area where appropriate. Those individuals serving as members of the stakeholder group for this study area included:

- Carol Kent, Director, Motor Vehicle Division, Enforcement Section.
- Doroteo "Ted" Hernandez, MVD Investigator.
- David George, MVD Investigator.
- Beverly Trumble, MVD Investigator.
- Philip Pettit, Motor Carrier Division, MCO Field Operations Supervisor.
- Bob Hagan, Easy Auto Sales, Houston, Texas.

- Keith Hagler, Taylor Auto Credit, Taylor, Texas.

Our audit analysis approach generally consisted of the following work steps:

- Conducting detailed interviews of stakeholders and reviewing available documentation.
- Conducting a best practices survey of peer states on several issue areas related to the audit study area scope to supplement the knowledge of the audit team.
- Defining a set of audit issues and then identifying a series of potential alternatives for addressing these issues which were then analyzed in more detail. These alternative strategies included:
  - Improving the licensee/investigator ratio through the hiring of additional staff and the re-alignment of the MVD enforcement staff on a regional basis.
  - Adopting anti-curbstoning legislation on a statewide basis.
  - Commissioning all or some MVD investigators as peace officers.
  - Repealing the cure letter statute to allow MVD to more effectively enforce dealer advertising restrictions.
- Reviewing and validating these alternative strategies with the stakeholder team in two workshop sessions to ensure that the audit team's subsequent recommendations were being developed based on a set of facts upon which there was general agreement with the stakeholders. The first session focused on identifying potential alternatives that should be studied in detail; the second session provided a walkthrough of the key elements of the audit team's analysis of each potential strategy.
- Developing recommendations and documenting these recommendations in this report chapter.

Work in this study area involved conducting detailed interviews with 15 TxDOT staff and external stakeholders. Exhibit X-2 summarizes these interviews by role and function.

Exhibit X-2: Interviews by Role and Function

Name	Role	Function
Carol Kent	Director	MVD Enforcement Section
Doroteo "Ted" Hernandez	Investigator	MVD Enforcement
David George	Investigator	MVD Enforcement
Beverly Trumble	Investigator	MVD Enforcement
Philip Pettit	Supervisor	MCD Operations Investigation Unit
Bob Hagen	External Stakeholder	Easy Auto Sales – Houston TX

Name	Role	Function
Keith Hagler	External Stakeholder	Taylor Auto Credit – Taylor TX
Bill Harbeson	Managing Attorney	MVD Enforcement
Jack Chrane	Chief Investigator	MVD Enforcement
Don Chrismer	Advertising Chief Investigator	MVD Enforcement
Judy Manion	Attorney	MVD Enforcement
Tyna Rodriquez	Assistant Chief Investigator	MVD Enforcement
Dawn Heikkila	Division Administrative Manager	Motor Vehicle Division
Dean Aaron	LACE Project Manager	TxDOT Information Services Division
L. David Brunke	Director - Consumer Affairs	MVD LACE Program Manager

E. Best Practice Survey of Other States

Dye Management Group, Inc. conducted a survey of other states, as well as local jurisdictions within Texas to understand how others are addressing several specific issues which arose during our review of this study area. The best practices survey addressed the following areas:

- Ratio of investigators to licensees in other states.
- Extent to which investigators in other states are commissioned peace officers.
- Types and severity of penalties for operating as an unlicensed dealer.
- Prohibitions on and penalties for curbstoning.

The focus of the first three areas was practices in other states. States targeted for the survey effort included jurisdictions that had high numbers of franchised and independent licensees. The review of curbstoning laws also included a survey of ordinances in a number of Texas municipalities.

1. Ratio of investigators to licensees

The audit team sought to benchmark the ratio of investigators to licenses in other states. MVD currently manages 16,318 licensees and the Enforcement Investigations Section has 14 investigators. This places the licensee-to-investigator ratio for Texas at 1,166. As illustrated in Exhibit X-3, the average ratio for the next six largest jurisdictions combined is 216 licensees per investigator.

Exhibit X-3: Licensee to Investigators Ratios by State

Jurisdiction	No. of Licensees	No. of Investigators	Ratio
TEXAS	16,318	14	1,166
NEW YORK	17,000	120	142
CALIFORNIA	14,858	250	59
NORTH CAROLINA	8,000	95	84
PENNSYLVANIA	17,763	75	236
INDIANA	6,000	11	546
MISSOURI	6,395	28	229
AVG – ALL STATES	***12,333***	***85***	***351***
AVG. W/O TEXAS	***11,669***	***97***	***216***

2. Extent to which investigators in other states are commissioned peace officers

The survey of other states conducted by the audit team shows that there is a reasonable amount of variation between states in terms of the extent to which motor vehicle investigators are commissioned peace officers. In some states, all investigators are commissioned peace officers, while in other states only a certain number of investigators are commissioned officers. Likewise, in some states, like Texas, investigators are not commissioned peace officers. A summary of our findings by state on this issue is provided below:

California - California has 14,858 licensees and 250 investigators. Of the 250 investigators, 128 are commissioned officers and 122 are non-commissioned officers. The non-commissioned officers also perform inspections of a licensee applicant's premises before their license is issued.

Indiana – Indiana has 6,000 licensees and 11 non-commissioned investigators.

Missouri – Missouri has 6,395 licensees and 28 non-commissioned investigators. The investigators work for the Department of Revenue.

North Carolina - Currently North Carolina has approximately 8,000 licensed dealers. The North Carolina Department of Transportation Division of Motor Vehicles (DMV) License and Theft Bureau has 95 inspectors, which are sworn state law enforcement officers that investigate dealer activities in the state. Most inspectors have over 100 dealers assigned to them with some variability in work load depending on the district in which they are assigned. The 95 inspectors cover 100 counties in North Carolina

and are assigned to eight geographical districts. They have four attorneys with the Attorney General's Office that are assigned to assist the DMV. Inspectors also consult with the staff of district attorneys in individual counties as required. The inspectors report to eight district offices and are housed in approximately 42 field offices. In 2006, the inspectors conducted 4,594 dealer investigations. Most of their investigations take approximately 30 days to complete.

Pennsylvania - Pennsylvania has approximately 17,643 licensees and 75 commissioned investigators. The investigators also carry out criminal complaint investigations in addition to dealer licensing complaint investigations.

3. Penalties for operating as an unlicensed dealer

There are a number of different approaches that states are taking in terms of enforcing the requirements for dealers to obtain a license. In this regard, the audit team reviewed a statute in North Carolina, as well as pending legislation in Georgia and Maryland. North Carolina has a prohibition against acting as a dealer without a license and has established civil penalties for violating this statute. Georgia has legislation pending which is similar to the current Texas statute. Maryland has legislation pending which tightens the definition of what constitutes being a dealer and provides for tougher penalties for violating the statute including potential jail time. Highlights of our findings from each of these states are presented below.

North Carolina - North Carolina presently has a law that specifies a civil penalty against any person who is required to obtain a license under the licensed dealer language and has not done so.

North Carolina General Statute 20-87 addresses unlicensed dealers and is shown below:

- **Section 20 287 Licenses required penalties**

(a) License Required. – It shall be unlawful for any new motor vehicle dealer, used motor vehicle dealer, motor vehicle sales representative, manufacturer, factory branch, factory representative, distributor, distributor branch, distributor representative, or wholesaler to engage in business in this state without first obtaining a license as provided in this Article. If any motor vehicle dealer acts as a motor vehicle sales representative, the dealer shall obtain a motor vehicle sales representative's license in addition to a motor vehicle dealer's license. A sales representative may have only one license. The license shall show the name of the dealer or wholesaler employing the sales representative. The following license holders may operate as a motor vehicle dealer without obtaining a motor vehicle dealer's license or paying an additional fee: a manufacturer, a factory branch, a distributor, and a distributor branch. Any of these license holders who operate as a motor vehicle dealer may sell motor vehicles at retail only at an established salesroom.

(b) Civil Penalty for Violations by Licensee. – In addition to any other punishment or remedy under the law for any violation of this section, the division may levy and collect a civil penalty, in an amount not to exceed one thousand dollars ($1,000) for each violation, against any person who has obtained a license pursuant to this section, if it finds that the licensee has violated any of the provisions of G.S. 20 285 through G.S. 20 303, Article 15 of this Chapter, or any statute or rule adopted by the division relating to the sale of vehicles, vehicle titling, or vehicle registration.

(c) Civil Penalty for Violations by Person without a License. – In addition to any other punishment or remedy under the law for any violation of this section, the division may levy and collect a civil penalty, in an amount not to exceed five thousand dollars ($5,000) for each violation, against any person who is required to obtain a license under this section and has not obtained the license, if it finds that the person has violated any of the provisions of G.S. 20 285 through G.S. 20 303, Article 15 of this Chapter, or any statute or rule adopted by the division relating to the sale of vehicles, vehicle titling, or vehicle registration. (1995, c. 1243, s. 3; 1991, c. 662, s. 2; 2001 345, s. 1; 2005 99, s. 1.)

Georgia - Georgia's proposed legislation contains the following language:

(a)(1) An owner or lessee of any real property shall not authorize more than five used motor vehicles within any 12 month period displayed or parked on such real property for the purpose of selling or advertising the sale of such used motor vehicles by the owner or lessee of such vehicles.

(2) An owner or lessee of any real property shall not authorize more than two used motor vehicles at the same time displayed or parked on such real property for the purpose of selling or advertising the sale of such used motor vehicles by the owner or lessee of such vehicles.

(3) An owner or lessee of any used motor vehicle shall not display or park such used motor vehicle on the real property of another for the purpose of selling or advertising the sale of such used motor vehicle if the display or parking of such vehicle will cause the owner or lessee of the real property to be in violation of paragraph (1) or (2) of this subsection.

(4) An owner or lessee of any used motor vehicle shall not display or park such used motor vehicle on the real property of another for the purpose of selling or advertising the sale of such used motor vehicle unless the owner or lessee of such vehicle has the prior permission of the owner or lessee of the real property.

Maryland - Maryland's legislation is attempting to better define a dealer and also to clarify penalties. Maryland's proposed language change decreases the number of vehicles (from five to three) that a person may offer to sell within a 12-month period before being considered a dealer. The bill establishes a presumption that a person who offers to sell three or more vehicles during any 12-month period acquired the vehicles

for resale purposes and places the burden of rebutting the presumption (by a preponderance of evidence) on the vehicle owner. It also increases the penalty for selling vehicles without a dealer's license from a maximum fine of $1,000 and six months in prison to a fine of up to $5,000 and one year imprisonment.

4. Prohibitions on and penalties for curbstoning

The audit team reviewed ordinances in a number of Texas municipalities related to curbstoning. The audit team was specifically interested in ordinances adopted by municipalities which provide law enforcement with different types of enforcement authority against curbstoning including the ability to tow the vehicle.

The City of Houston, for example, has adopted an ordinance which defines and prohibits curbstoning and provides law enforcement with the authority to remove the vehicle (after an attempt to provide notice of the pending removal). The key elements of this ordinance are outlined below.

- **Houston Ordinance - The Sale of Used Motor Vehicles at Certain Locations.**

Section 10-432 Motor vehicles for sale; penalties; towing

(a) Except as provided in subsection (b) of this section, it shall be unlawful for any person to park a motor vehicle on public or private property having displayed thereon any writing indicating such vehicle is for sale.

(b) The provisions of this section shall not apply to:

(1) A vehicle parked on private property having both a certificate of occupancy issued by the city and a license from the Texas Department of Transportation authorizing the sale of vehicles at that location.

(2) A single vehicle legally parked on the premises of, or in the right of way immediately adjacent to a residence provided the vehicle is owned by or registered to the occupant of the residence; or

(3) A vehicle parked on either public or private property adjacent to a building or location to which the vehicle owner has traveled to perform their normal course of business or employment or on a personal errand.

(4) A vehicle located on private property that has affixed on the windshield a notarized statement from the property owner or authorized agent indicating that the vehicle owner has permission to sell the vehicle on the property. The notarized statement shall include the name, address and telephone number of the property owner or authorized agent. If the property owner is a partnership or corporation, the notarized statement shall include the name, address, and telephone number of one of the partners or one of the principals.

(c) A violation of this section shall constitute a class C misdemeanor.

(d) Subject to the provisions in subsection (e) of this section:

(1) A vehicle parked on public property in violation of this section shall be subject to immediate removal; or

(2) A vehicle parked on private property in violation of this subsection shall be subject to removal not sooner than 2 hours after the notice pursuant to section 40-433 of this Code is attached to the vehicle.

(e) Prior to causing a vehicle to be removed pursuant to subsection (d), the police chief shall attempt to contact the individual whose phone number appears on the 'for sale' sign of the vehicle by phone to provide an opportunity for that individual to remove the vehicle. If contact is made, the individual shall have one hour to remove the vehicle from that location after the police chief has contacted him regarding the violation.

Section 40-134 Procedures for towing; contesting a tow

(a) All tows conducted pursuant to this article shall be performed in accordance with chapter 8 of this Code.

(b) The owner or operator of a vehicle has the right to contest the towing of the vehicle under chapter 685 of the Texas Transportation Code. A hearing under chapter 685 shall be in the justice court having jurisdiction in the precinct in which the vehicle storage facility is located.

In addition to Houston, a number of other Texas cities have also adopted anti-curbstoning ordinances. These include the following:

- **Plano** – Ordinance 97-1-17 prohibits the parking of vehicles for sale near major thoroughfares and provides a procedure for towing and storage of vehicles in violation of this ordinance at the expense of the owner.
- **Duncanville** – Ordinance 1443, Chapter 12, Section 12-11 prohibits parking of vehicles for sale.
- **El Paso** – Title 13, Chapter 13.20, Section 13.20.040 prohibits the selling of merchandise on or near the public right of way.
- **Dallas** – Section 25-85 of the City of Dallas Municipal Code prohibits parking for certain purposes and parking on highways and parkways within the city limits.
- **Pasadena** – Section 22-38 prohibits the placing of motor vehicles for sale without consent.

F. Key Findings

These findings are based on our discussions with TxDOT staff and stakeholders, surveys of peer states and Texas municipalities, and a detailed review of the various alternative strategies for improving service delivery for the MVD enforcement function. These key findings include:

1. The current ratio of investigators to licensees is much larger than that of other peer states and prevents the Enforcement Section from effectively managing caseload volumes

MVD currently manages 16,318 licensees and the Enforcement Investigations Section has 14 investigators. The licensee to investigator ratio is currently at 1,166 licensees per investigator. This is extremely inconsistent with best practices nationally. The survey of peer states, conducted as a part of this audit, revealed that Texas plus six other peer states have an average of 12,333 licensees and an average of 85 investigators. The survey also reflects that the average ratio of licensees to investigators, not including Texas, is 216 licensees per investigator. Employing the survey average of 216 licensees per investigator, Texas would have to have 75 investigators or an increase of the investigative staff by 61 investigators to equal the average number of licensees per investigator in the peer states survey.

2. TxDOT is not close to achieving its target of an average of 50 open cases per investigator

MVD has established a target of 50 open cases per investigator. Historically, this target has never been achieved, primarily due to the significant lack of ongoing staff resources. In February 2007, there were 3,617 open investigation cases or an average caseload of 258 cases for each investigator.

3. At existing staffing levels and target productivity standards, it will be very difficult for MVD to clear the current caseload backlog

Current performance standards for the investigators who are classified as Transport Investigator II through Transport Investigator IV include the goal that 'Investigators shall turn in an average of 25 of cases per month.' A review of output statistics during the first six months of both FY 2006 and FY 2007 shows that the average case closure rate for the Enforcement Section was 2,344 cases, or an average monthly closure rate of 28 cases per investigator. At this closure rate, the Enforcement Section should be able to close approximately 4,700 cases a year. There were 4,597 active FY 2006 cases carried over into FY 2007. In addition, the section normally receives about 5,000 new complaint cases each year. Thus, at the present level of staffing, even if the target case closure rate is consistently achieved, MVD, as illustrated in Exhibits X-4 and X-

5, will not be able to clear the ongoing backlog of cases, but would create an ever-increasing backlog.

Exhibit X-4: Hypothetical Case Closure Rate Chart

FY06/FY07 Case Closure Rate (CCR)	Average CCR per Investigator	Total CCR for FY07
2,344	28	4,700

Exhibit X-5: Hypothetical Ongoing Case Closure Backlog Chart

Carryover From Previous Fiscal Year	Estimated New Complaints per Year	Carryover of Cases in Subsequent Years
4,597	5,000	4,897
4,897	5,000	5,197
5,197	5,000	5,497

4. Case aging in Texas is much higher than the experience reported in other peer states

Of the 3,617 open cases, 1,948 cases were over 12 months old including 901 that were over 18 months old. The survey of peer states revealed that the average case aging was approximately 30 days. The Enforcement Section, however, is currently in reactive mode due to the ongoing backlog of active cases and the limited number of investigators. Once the open files age beyond 12 months, the integrity of the data becomes questionable, and some degree of rework is required to revalidate the data to ensure that the information related to both the complainant and the suspected violator are still accurate and complete.

Exhibit X-6 illustrates the number of investigative cases that are aged less than 180 days, over 180 days, and over 360 days by month during the first half of fiscal year 2007.

Exhibit X-6: Case Aging Statistics for First Half of FY 2007

Aging Category	Sep	Oct	Nov	Dec	Jan	Feb
Less than 180 days	1,081	1,053	1,058	989	966	933
Between 180 & 360 days	1,352	1,280	1,027	921	753	737
Greater than 360 days	2,090	2,032	2,051	2,031	2,075	1,947

5. MVD cannot protect the licensing integrity of a properly licensed dealer because it lacks the authority to enforce dealer licensing regulations against unlicensed dealers

There are three categories of unlicensed violations that the MVD Enforcement Section encounters. The first category is when a licensed dealer is offering a vehicle for sale in a location that is not the dealer's authorized place of business. The second category is when a licensed dealer is offering a vehicle for sale and the dealer is not licensed to sell that type of vehicle. In these first two instances, MVD has the statutory authority to investigate and resolve the reported violations.

Curbstoning is the third category of violation and is defined as an unlicensed dealer (curbstoner) who buys, sells, and trades more used vehicles than Texas allows without a license. In almost every case, the curbstoner has no fixed place of business and fails to adhere to most of the accepted industry practices or customs. It is not known how much revenue that curbstoners generate, although industry officials acknowledge that the amount is significant. Since curbstoners do business illegally, it is likely that their income from sales goes unreported. Jurisdictional attempts to enforce licensing laws against curbstoners are hampered by a lack of personnel and money. Furthermore, with no fixed place of business, a curbstoner is often difficult to track. Signs of potential curbstoning include:

- Multiple auto listings in a paper with the same phone number.
- Displays of multiple vehicles 'for sale' in shopping centers or similar parking lots all with the same phone number.

When MVD receives a complaint regarding curbstoning, the investigator must thoroughly investigate the complaint to determine whether a violation occurred and whether the violator is a licensed or unlicensed dealer. MVD has the authority to pursue violations by licensees. However, there is no statutory authority granted to MVD to pursue a violator that is not licensed. It is the current practice of the Enforcement Section to refer the complaint to the local law enforcement function in the county in which the violation occurred.

On average, based on information received from industry representatives, a properly licensed dealer spends about $25,000 every month to maintain operations and insurance. The unlicensed violator has no fixed place of business and fails to adhere to accepted industry practices or customs. Thus, the licensed dealer is at a financial disadvantage versus the curbstoner in terms of the cost of adhering to the requirements of their license.

Likewise, a consumer buying a vehicle from a person that is not a licensed dealer runs a high risk that the vehicle may have been stolen or may have a rolled-back odometer. The vehicle may also be salvaged, reconditioned, or flood damaged. The consumer who purchases a vehicle from an unlicensed dealer often has no recourse if the vehicle has problems.

6. MVD investigators lack of being commissioned as peace officers can impact their ability to efficiently and effectively investigate a case

TxDOT does not currently have any commissioned law enforcement officers engaged as employees of the department. Article 2.12 of the Texas Code of Criminal Procedures (CCP), contains the definition and description of peace officers in the state. In order to be a peace officer in Texas, authorizing language must appear in Article 2.12 of the CCP. Article 2.12 contains descriptive language of the departments or agencies that are allowed to authorize peace officers within their organizations, such as "investigators commissioned as peace officers by (name of entity)."

There are a number of case situations where the presence of a commissioned peace officer could improve the timeliness, accuracy, or completeness of the process of collecting or reviewing various records while at licensee locations throughout the state. In the opinion of a number of investigators interviewed by the audit team, MVD investigators do not have a recognizable official authority to properly carry out their duties. The investigators carry a badge that identifies themselves as an investigator of the Motor Vehicle Board; however this badge does not provide any legal authority.

7. TxDOT enforcement investigators sometimes find themselves in situations that could threaten their personal safety

A number of instances were documented for the audit team of situations where during investigation site visits, an MVD investigator felt that their personal safety might have been in jeopardy. Licensees know that the investigators lack legal authority to require compliance with rules and regulations governing their operations. There are instances when an investigator requests documentation that is needed during their investigation. The request may be refused by the licensee in such a manner that the investigator feels threatened. When these situations present themselves, an investigator must leave the premises and secure assistance from local law enforcement to accompany them back to the authorized place of business to acquire the documentation requested.

The audit team recognizes that TxDOT management is hesitant about the agency's employees taking on police powers. However, the staff are performing an enforcement function that presents the potential for some personal safety issues and this risk is likely higher for motor vehicle dealer enforcement activities in some parts of the state than the risks typically faced by other TxDOT staff (i.e. maintenance staff, etc.). We believe this is substantiated by a number of examples our team was told about in which individuals ultimately convicted of serious crimes were at some point either operating and/or associated with independent dealerships and had been investigated by TxDOT staff at the same time they were being looked at by law enforcement agencies for various felony charges. Also, it is note worthy that many other state agencies that have enforcement powers of one type or another have commissioned officers on their investigative staff. Two examples are the General Services Commission and the State Board of Dental Examiners.

8. The Advertising Cure Letter legislation effectively limits MVD's ability to proactively enforce provisions of the dealer advertising law

The Advertising Cure Letter statute as currently written substantially impacts MVD's ability to enforce state law regarding dealer advertising. The law only allows MVD to file a complaint if a dealer has (a) previously received a cure letter and (b) commits a violation of the same specific advertising provision again within a 12-month period. Violations of different advertising provisions, even if cure letters had been sent for other violations within the prior year, require a new cure letter and have a separate clock for future violations.

The Occupations Code, Section 2301.203.(c), contains the cure letter law's statutory wording and specifies that MVD may not file a complaint alleging an advertising violation until MVD has notified the license holder of the alleged violation and given the license holder an opportunity to cure the violation without further proceedings or liability.

Title 43, Part 1, Chapter 8, Subchapter H of Rule 8.271 includes that MVD may file a complaint against a licensee alleging a violation of an advertising provision pursuant to Occupations Code, §2301.203, only if the division can show that the licensee who allegedly violated an advertising provision has received a notice of an opportunity to cure the violation by certified mail, return receipt requested, and that the licensee committed a subsequent violation of the same exact advertising provision within the period "beginning 15 days and ending 12 months after the licensee has received the notice required."

The dealer advertising regulations contain 25 separate legal provisions, each with sub-provisions that a dealer cannot violate when developing advertising language or when publishing motor vehicle advertisements. Therefore, present language enables the licensee to potentially violate two separate provisions of the law each month during a twelve month period and only receive a cure letter as a warning. As long as the licensee does not repeat the same provision violation for at least 12 months between instances, the only action that can be taken by MVD is the issuance of a cure letter.

The current cure letter law was enacted on September 1, 1997. In the year before the law was enacted, there were 1,518 advertising complaints received by MVD. During the following year, MVD received 819 complaints. In 2006, MVD received only 478 complaints. Enforcement Section staff believes the reduction in complaints was attributable to the industry knowledge that MVD could no longer assess a significant penalty for advertising violations.

Prior to the passage of this law, when a dealer was in violation of the advertising law, MVD investigated the complaint and either sent a warning letter or filed a petition with suggested fines to be assessed in the case. Under the current law, MVD must repeatedly issue cure letters for each distinct new violation that occurs in the following 12 months. Most complaints are received from dealers and pertain to one of their

competitors. Over 95% of the complaints received are violations that are confirmed after further investigation since the complainant is very familiar with the rules governing their industry.

9. The centralized structure of MVD's investigation staff limits the depth of coverage available across the state and reduces the flexibility to be able to respond to complaints in a timely manner

MVD has 14 investigators, two chief investigators, and an assistant chief investigator all based centrally in Austin. While all of the MVD investigators are required to spend a minimum of 40 hours in the field every month, the centralized organization of the MVD investigation function provides less intense geographic coverage and allows less flexibility to address and respond to a complaint in a timely manner.

The Motor Carrier Division (MCD), on the other hand, has 11 investigators plus a supervisor. Three MCD investigators are based in Austin, four in Dallas/Fort Worth, two in Houston, and two in San Antonio. The three MCD investigators that are Austin-based also often spend up to half their time in the field assisting in both urban and rural locations. Those investigators that are regionally deployed have a greater degree of flexibility in pursuing investigations and can easily respond to fluctuations in caseload volumes throughout the state. MCD's regionally deployed investigations would also appear to have the opportunity to develop better working relationships with local law enforcement and with their regulated clients.

10. TxDOT does not currently conduct pre-license inspections

Texas is the only state of the top ten jurisdictions with a large dealer population that does not pre-inspect licensee applicants. MVD believes that doing so may reduce the number of complaints about individuals who obtain a license for purposes other than engaging in the vehicle sales business at a permanent location. However, the division has not had sufficient staff resources necessary to conduct inspections.

Very recently, MVD released an Invitation to Bid (ITB) in an attempt to outsource this function. An Invitation for Bid (IFB) was released in February 2007 to secure vendors willing to perform pre-licensing inspections for the MVD in order to:

- Provide on-site field inspections of independent motor vehicle dealership premises at locations throughout the state.
- Determine whether the dealership premises meet the rules and regulations necessary to hold a motor vehicle dealer license.

The ITB response was less than desired and those that responded and were properly qualified did not offer coverage throughout the state.

11. FTE justifications and allocations are not typically prepared at the division level based on how these FTE allocations link to a division's ability to meet their customers' service level expectations

MVD management was not able to clearly articulate the basis for their current full-time equivalent (FTE) allocation. They also were not able to show any analysis which ties their FTE allocation to their target level of service and/or any analysis on the projected impact of changes (positive or negative) in FTE levels on the level of service to the division's customers. The Motor Vehicle Commission's FTE allocation was, like all state agencies, set by the Legislature. Those FTEs were transferred to TxDOT when the Commission merged into TxDOT as the Motor Vehicle Board. The acquisition of independent vehicle dealer regulation, without sufficient FTE increase, in 1995 drastically affected MVD's ability to provide proper and timely service to the public and the dealer body.

Further analysis revealed that most division and section management were not aware of what criterion was employed to develop staffing needs or projections. The audit team was referred to TxDOT senior management and discussed this issue with Mr. Edward Serna, Assistant Executive Director for Support Operations. Mr. Serna was able to describe what factors were used to arrive at staff allocations for MVD. He related that, at some point in the past, the independent Motor Vehicle Board had established the number of positions to support their activities. When the Motor Vehicle Board was merged into TxDOT, the department continued to use the Motor Vehicle Board's FTE numbers as a baseline. Positions were added or subtracted from that baseline number based upon requests submitted by division management. These requests for changes in FTE allocation, however, did not appear to be tied formally in any way to an analysis of improvements or impacts in customer service levels or other outcome measures based on changes in resourcing or other investments within MVD.

12. There is no system design for the external phase of LACE which is currently targeted for a 2008 go-live; in addition, there are some concerns by stakeholders about the functionality and capability of the initial phase which has just been deployed

The initial phase of LACE which is focused on internal operations went 'live' on May 1, 2007. A second phase which provides Web-based capability for dealers to perform a number of functions is targeted for implementation in 2008. This second phase has only been designed at a 'conceptual' level. No formal system design, detail design, or development work has taken place to date.

The audit team recognizes the outstanding commitment and effort by MVD and TxDOT's information technology staff to assume responsibility for and complete the delivery of the first phase of LACE. Due to the imminent rollout of the initial internal phase of the LACE project, the audit team was not in a position to fully measure,

assess, or evaluate the success of the first phase of the LACE project. However, during our detailed interviews and stakeholder team meetings, there were a number of issues highlighted by various stakeholders that conveyed a sense of apprehension regarding the success factors for the May 1, 2007 rollout and the planned implementation of the external access phase now scheduled to occur in February 2008.

G. Recommendations

This section presents our go-forward recommendations for improving the efficiency and effectiveness of the MVD enforcement function. The recommendations include a number of steps designed to improve caseload throughput and case closure rates, improve the safety of MVD investigators, provide MVD investigative staff with additional authority to pursue unlicensed dealers and more aggressively address the problem of curbstoning, and strengthen the regulation of deceptive advertising.

Our recommendations also include the implementation of an improved business planning methodology to provide a framework for ongoing analysis of the business unit performance and the impact of future investment decisions for MVD and other business units. Likewise, these recommendations include a slow-down in the process of deploying the external phase of the LACE project to allow for the institutionalization of the current internal phase of LACE and a proper re-scoping effort for the external phase including an updated work plan, cost estimate, and business case prior to initiating work.

Exhibit X-7 below summarizes our recommendations by proposed timeframe. We then describe each recommended action step in further detail below.

Exhibit X-7: Recommendation Implementation Timeline

Recommendation	Within 12 months	Within 24 months
Increase the case closure rate and begin to reduce the caseload backlog by enlarging and regionalizing the investigations staff		✓
Network to expand the pre-inspection licensing services invitation list to attract a larger number of eligible responses to future Invitations to Bid (ITB)	✓	
Conduct a formal organizational performance review in two years		✓
Pursue statewide anti-curbing legislation which increases the penalties for curbstoning and provides statutory ability for MVD or other law enforcement officers to authorize removal of vehicles which are being curbstoned by a licensed towing entity		✓

Recommendation	Within 12 months	Within 24 months
Request the statutory authority to commission some Motor Vehicle Division investigators as commissioned peace officers		✓
Establish partnerships with law enforcement agencies in areas with the highest incidence of enforcement activities and utilize this as a model for rollout across the state	✓	
Seek repeal of Section 2301.203(c) of the Occupations Code and Rule 8.271 Title 43; Chapter 8; Subchapter H of the Texas Administrative Code to remove the advertising enforcement limitations these legal references impose on the Motor Vehicle Division		✓
Focus on institutionalizing the internal phase of LACE; then beginning in late 2007, re-scope, re-plan and revalidate the proposed external phase of the LACE initiative	✓	
Design, develop, and implement a business planning methodology department-wide	✓	

1. The audit team recommends that TxDOT increase the case closure rate and begin to reduce the caseload backlog by enlarging and regionalizing the investigations staff

The audit team recommends that TxDOT increase the size of the MVD investigations staff and regionalize the investigation staff organization to provide increased flexibility to cover all areas of the state. Specifically, the audit team recommends that MVD take the following steps:

- Increase the size of the investigations staff by 22 investigators, along with companion increases in attorneys and staff support for a total of 28 additional positions.
- Realign the current staff and the proposed new staff after sufficient training, into three regional investigative units that are deployed across the state to provide for more extensive geographic coverage.
- Conduct a formal internal review of the organizational performance (i.e. case closure rate, case backlog and case aging, etc.) of the Enforcement Section in two years or at such time as the expansion and re-alignment has been completed and sufficiently institutionalized to assess any additional investment needs in this area. This time period would allow for the internal components of LACE to be fully operational and the new staff and regional organization to have begun to be institutionalized. The recommended business planning methodology should be used as an essential element of this review (please refer to Section X.G.5.).

Each of these elements of our recommendations is discussed in further detail below.

Expand investigative staff

Specifically, we recommend that TxDOT increase the investigations staff by hiring 22 positions which includes 19 investigators and three (3) managing investigators to maintain TxDOT's desired ratio of 11 staff for every one supervisor. The legal staff should also be increased by five positions in order to maintain the desired attorney to investigator ratio of 3 to 1. One additional staff support position should also be hired to supplement the current support team and provide support to the new investigative positions.

This expansion will bring the total investigations staff to 33 staff investigators (19 new and 14 existing). The management staff will then consist of three (new) managing investigators, two existing chief investigators and one assistant chief investigator. MVD has indicated that there could be an opportunity to streamline the total number of management staff required to oversee the investigative staff. We would encourage MVD to explore this further as part of the expansion of the investigative staff.

This increase in investigators will reduce the ratio of licensees to investigators by over 60% from the current 1,166 to 453. It will also increase the average case closure rate by 550 additional cases each month once all of the new investigators have completed their learning curve (25 cases * 22 new investigators).

Regionalize investigative staff

These 22 new positions should be thoroughly trained and then regionally deployed within three regional areas of the state to begin actively working the case backlogs to reduce them to levels that are more manageable. The regional deployments should be in the Dallas metropolitan area, the Houston metropolitan area, and in the Austin metropolitan area. The Austin regional office will primarily work complaints for the western half of Texas and will assist in the Dallas and Houston metropolitan areas as needed.

All current Austin-based investigator positions should also be re-assessed to be deployed regionally as well. Regionally deployed investigators will be able to establish an ongoing relationship with local law enforcement agencies that will aid in securing required documentation from less cooperative licensees. Furthermore, licensees will realize that an investigative team is based in the area and that spot inspections can occur at any time. This will generate better compliance by dealers since they can be regularly inspected without prior notice. These regional deployments will support proactive enforcement efforts in the areas of licensee concentration within each work region.

Once the backlog of cases has been reduced to manageable levels, the Austin and regionally based investigative teams will be capable of proactively managing the

provisions of the dealer licensing regulations and create an environment where greater compliance is achieved. This recommendation will also enable the Enforcement Section to maintain acceptable case aging statistics. By being capable of investigating cases in a timely manner, the Enforcement Section can begin to avoid the duplication of effort now being incurred when cases age beyond 12 months.

Conduct a formal organizational performance review in two years

TxDOT should conduct a formal review of the Enforcement Section's organizational performance two years following the increase in investigatory staff, the regionalizing of the organization, and the implementation of LACE. As part of this review, MVD management should assess the impact of these changes on reducing current backlogs, improving customer service levels, and proactively addressing dealer violation activities. This performance review should specifically focus on improvements in the case closure rate, case backlog, and case aging. At that time, TxDOT should assess the feasibility of adopting more aggressive targets for these metrics and the level and types of additional investment (if any) which may be required to achieve these more aggressive performance standards.

2. The audit team recommends that TxDOT network to expand the pre-inspection licensing services invitation list to attract a larger number of eligible responses to future Invitations to Bid (ITB)

An Invitation to Bid document, released in February 2007, sought to identify qualified respondents that would be willing to perform on-site field inspections of independent motor vehicle dealership premises at locations throughout the state. The pre-license inspections are needed to determine whether the dealership premises meet the rules and regulations necessary to hold a motor vehicle dealer license. Three of the initial responses were eliminated because the respondents did not meet vendor qualifications. The remaining bids were not sufficiently comprehensive nor did they elect to provide services for all areas of the state.

The buyer who managed the bid process at TxDOT's General Services Division acknowledged that the state was not initially certain to whom the invitations should be sent and this issue was the reason the department chose not to pursue the few qualifying bids. Those bids that were received generally came from structural engineering firms. In discussions with MVD management, it was perceived that retired police and fire personnel would be the most likely candidates for providing these services. The audit team recommends that the MVD discuss their needs with the various police officer and firemen associations in Texas to identify potential candidates that may be interested in providing pre-license inspection services, such as the Houston Retired Police Officers Association, the Texas Hispanic Police Officers Association, the National Reserve Law Officers Association, and the State Firemen's & Fire Marshals' Association of Texas, among others. These associations may have retired members that may be interested in providing these services for the MVD.

3. The audit team recommends that TxDOT pursue statewide anti-curbing enabling legislation and rulemaking to increase the penalties for curbstoning and provides the ability for MVD or other law enforcement officers to authorize the removal by a licensed towing entity of vehicles which are being curbstoned

The audit team recommends that, during the next legislative session, the Texas Transportation Commission seek enabling legislation and development of rules to provide for tougher anti-curbstoning legislation on a statewide basis. This enabling legislation should have two key provisions:

- The ability for MVD investigative staff or other law enforcement to authorize the removal by a licensed towing entity of a vehicle which is being curbstoned.
- Stronger penalties for repeated violations of curbstoning statutes.

We believe this proposed enabling legislation will provide a more consistent response to curbstoning on a statewide basis. It will also provide MVD with additional tools to adequately enforce the existing provisions of dealer licensing regulations. These changes will better protect the public at large from curbstoners. It will also strengthen the dealer licensing process and protect the investment licensed dealers are making by following the rules and regulations which licensed dealers are required to comply with.

It is our recommendation that the new governing language should convey that it would be unlawful for any person to park a motor vehicle on a right of way or any public property having displayed thereon any writing indicating such vehicle is for sale. The language should also contain wording that either local law enforcement or a TxDOT MVD investigator can sanction the removal of the vehicle by a licensed tow operator to the closest licensed vehicle storage facility. This legislation should have a notification provision requiring the law enforcement officer or MVD investigator to attempt to contact the individual whose phone number appears on the ‘for sale’ sign of the vehicle by phone to notify them of the violation and that the authorization to tow the vehicle has been issued. However, it is not believed that this notification should be a necessary prerequisite to initiating the actual towing of the vehicle.

Likewise, the audit team also agrees with the consensus of the stakeholder group that the penalties for repeated curbstoning violations should be strengthened. Consequently, it is recommended that the first violation of this anti-curbstoning legislation should be established as a class B misdemeanor (versus the current class C misdemeanor), with a second offense being a class A misdemeanor. Three or more curbstoning violations should elevate the violation to a state jail felony.

4. The audit team recommends that TxDOT request from the Texas Legislature the statutory authority to commission some Motor Vehicle Division investigators as commissioned peace officers

The audit team recommends that, during the next legislative session, TxDOT should pursue an amendment to Article 2.12 of the Texas Code of Criminal Procedures to provide the Texas Transportation Commission with the authority to commission MVD investigators as commissioned peace officers. TxDOT will also need to adjust Section 6 of the TxDOT Human Resources manual regarding miscellaneous prohibited conduct to provide an exception to the policy language, which would enable employees that are commissioned peace officers to carry or keep firearms or any other weapons on department property or at any time while working for or representing TxDOT. It is not the intent of this recommendation that all MVD investigators be commissioned at peace officers. Instead, it is anticipated that some of the more experienced investigators would be commissioned as peace officers based on their demonstrating the skills and experience required to be successful as an MVD investigator and the capacity to successfully manage the additional responsibility of being commissioned as a peace officer. Ideally, a few investigators in each of the proposed regions would have this status. It is anticipated that the Director of the MVD Enforcement Section would make specific recommendations on commissioning staff, which would then be presented to the Texas Transportation Commission through the Director of MVD and TxDOT senior management for review and potential action.

This change in status will provide the investigator who is commissioned as a peace officer with the necessary authority to carry out their assigned duties. The change will also enable the investigator to issue citations when violations are observed or encountered in the performance of their duties. The investigator would also no longer have to incur additional investigatory delays in order to seek assistance from a local law enforcement officer whose duty assignments often do not allow for providing timely assistance to the MVD investigator.

The audit team believes that the commissioning of some MVD staff as commissioned peace officers is essential since it will:

- Increase the overall efficiency of the investigative process by providing clear authority for investigators to gather and request information.
- Reduce the reliance on local law enforcement staff for initiating necessary enforcement actions.
- Improve the efficiency and effectiveness of the response to complaints by dealers and the public through a timelier resolution of cases.
- Provide an increased level of personal safety for investigators.

Members of the stakeholder team indicated that a number of licensees would potentially have concerns about MVD investigators being commissioned as peace

officers. The audit team recognizes the legitimate concerns of the dealer community about the investigators potentially misusing this additional authority. However, we feel this risk is mitigated by the fact that only some of the more seasoned and proven investigators would be recommended for commissioning and that the work of the investigators would be closely supervised by regional managing investigators, the chief investigator and the Director of the MVD Enforcement Section. In addition, in point of fact, all but one of the current MVD investigators are former police officers and some presently retain active commissions from various Texas law enforcement agencies.

5. The audit team suggests that TxDOT establish partnerships with law enforcement agencies in areas with the highest incidence of enforcement activities and utilize this as a model for rollout across the state

The audit team recommends that MVD management seek more formal partnerships with law enforcement agencies to provide support to the MVD investigations staff. We believe that initial discussions about these partnerships should be done at least at the MVD Director level, especially when reaching out to chiefs of police and elected district attorneys. We would recommend that TxDOT initially seek these partnerships in the areas with the largest amount of dealer issues and/or the most significant curbstoning activity and then utilize these first partnerships as a model for rollout across the entire state.

These partnerships with law enforcement agencies would include the establishment of formal memorandums of understanding about how and when MVD investigative staff can seek support from other law enforcement agencies and the specific level of service and response time to be expected from the law enforcement agency. We recommend that TxDOT initially work to establish this type of arrangement with the following types of law enforcement agencies:

- Department of Public Safety to provide for statewide coverage.
- State Comptrollers office who often audit motor vehicle dealers as a result of sales tax issues and where there may be some ability (subject to respective agency confidentiality issues) to share information between agencies.
- City police agencies in the largest metropolitan areas, especially those with automobile theft and other related specialized units.
- District attorneys offices, especially those who may have specialized task forces with automobile theft or closely related missions.

In establishing these relationships, it may beneficial to coordinate with the Automobile Theft Prevention Authority (APTA) who has established relationships with many of these agencies who are recipients of grants under the APTA program.

We believe the establishment of these formal partnerships can help to improve the effectiveness of MVD's investigative staff in the interim while the department is requesting statutory authority from the legislature to commission some staff as peace officers. Likewise, these relationships will offer additional options for providing support to investigative staff even after some investigators are commissioned as peace officers and these relationships can also be strengthened and enhanced as MCD implements the regionalized staffing model allowing for more day-to-day contact between MCD staff and local law enforcement agency partners.

6. The audit team recommends that TxDOT seek repeal of Section 2301.203(c) of the Occupations Code and Rule 8.271 Title 43; Chapter 8; Subchapter H of the Texas Administrative Code to remove the advertising enforcement limitations which have been imposed on MVD

The audit team recommends that, during the next legislative session, TxDOT should seek to repeal the cure letter language contained in Section 2301.203(c) of the Occupations Code and Rule 8.271 Title 43; Chapter 8; Subchapter H of the Texas Administrative Code which requires a separate cure letter to be sent for each distinct advertising violation. Instead, the statute should be revised to provide that a cure letter may be sent at the discretion of MVD upon the first offense of the statute by a dealer versus the first offense of each type of violation in a given 12 month period.

The current language prevents MVD from proactively enforcing advertising compliance by the regulated licensees. Likewise, the present statutory language does not provide a sufficient deterrent to encourage licensed dealers to avoid the use of misleading advertising. By streamlining the cure letter provisions of the dealer advertising statutes, MVD would again be able to enforce penalties for each violation.

The financial penalties are often significantly less than the dealer's revenue that is gained from the misleading advertisement. For example, the misleading advertisement may cost the dealer $500.00 but the revenue gained could be $50,000.00. The existing language effectively diminishes MVD's ability to enforce the law because it requires MVD to monitor and analyze all future published advertising of the dealer during a twelve month period to verify the dealer's compliance. This recommendation's intention is to return to the level of enforcement that existed prior to implementation of the cure letter law.

7. The audit team recommends that TxDOT focus on institutionalizing the internal phase of LACE; then beginning in late 2007, re-scope, re-plan and revalidate the proposed external phase of the LACE initiative

LACE represents a substantial investment on the part of MVD. It has taken significant effort including much hard work on the part of MVD and TxDOT information systems staff to complete and launch the internal phase of LACE.

LACE presents a tremendous opportunity to drive additional efficiencies in a number of areas of MVD operations through the use of technology. To ensure these efficiencies are realized, we would recommend that MVD initially focus on fully institutionalizing the internal components of LACE prior to initiating work on the external phase. This strategy will also ensure that the LACE software is fully functional and meeting the needs of MVD staff before taking on the additional risk and complexity of new non-TxDOT users of the system. It also will allow LACE development team members to focus on ensuring the success of the Phase I implementation, rather than having to split their efforts between production support and new development efforts. Our experience on similar multi-phase projects in the past is that when the next phase is initiated too soon, quite often either production support does not meet user expectations and/or development schedules for the next phase are not met.

Once the internal TxDOT phase of LACE has been institutionalized and demonstrated to be functioning as designed (likely towards the end of 2007), MVD should then re-scope and re-plan the external phase of LACE. This phase has only been designed conceptually. There is currently no system design or detailed work plan and accurate cost estimate for this effort. Likewise, much has changed in terms of both MVD and customer requirements and technology capabilities since the system was originally envisioned in 1998.

The audit team recommends that MVD take the following steps in regards to the external phase of LACE:

- Establish an advisory team of dealer representatives to provide input into the design effort.
- With assistance from MVD staff and the advisory team, conduct a formalized requirements definition effort and document these requirements.
- Develop a preliminary work plan and cost estimate based on 2008 costs for implementing the external phase as envisioned in the requirements document. This should include a plan for training, deploying, and supporting the wider external user base.

- Develop a formalized return on investment analysis for the proposed external phase; this should be a standalone cost/benefit analysis based Department of Information Resource (DIR) standards.
- Request formal approval through TxDOT and DIR as appropriate to initiate the next phase.
- Initiate system design and development activities following management approval.
- Leverage the customer advisory team throughout the system development process.

8. The audit team recommends that TxDOT design, develop, and implement a business planning methodology department-wide

The audit team recommends that TxDOT implement a business planning methodology which provides for an annual business planning process which specifically links investment and resourcing decisions such as the number of FTEs, contract dollars, and technology investment with target service levels based on measurable outcomes. In the case of MVD's enforcement function, these metrics could include items such as:

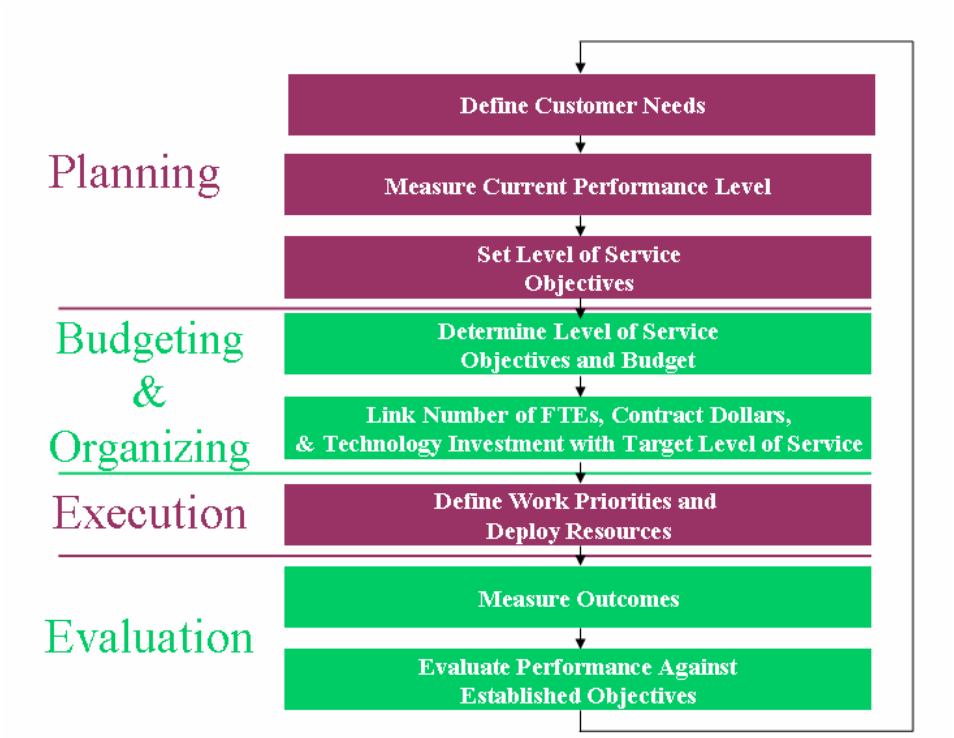
- Case per investigator.
- Cases closed per investigator per month.
- Net change in annual caseload backlog.

This process should actively involve the customers of each function to help establish service levels. This customer involvement can be achieved by establishing an ongoing customer advisory group, conducting additional customer surveys and/or conducting focus groups with customers.

This business planning process should provide for modeling of the impact of different resourcing and other investment decisions on the target service levels. It should also provide a mechanism for measuring the outcomes annually and a feedback process back into the annual planning process to adjust as appropriate the target service levels and recommendations.

Exhibit X-8 illustrates the concepts behind this business planning process.

Exhibit X-8: Business Planning Process



The study team acknowledges TxDOT's concerns that this planning methodology may be difficult to implement due to policy-maker concerns in the past about the size and scope of TxDOT's recommended strategic and business plans. However, it is still highly recommended that this option be explored. We have found in the past that this type of methodology can provide an agency with the framework to provide policy-makers with clear information on the impact of decisions (i.e. adding or eliminating resources) on the level of service which can be provided. We also have found that the integration of customer input in determining the target level of service is viewed very favorably by policy-makers when reviewing recommended budgeting and investment levels to achieve the proposed level of service.

Taken together, the audit team believes these recommendations will improve the overall efficiency and effectiveness of the MVD enforcement function by providing additional resourcing to address caseload throughput and backlog, improving case aging, and strengthening the Enforcement Section's ability to address critical concerns of the dealer community and the general public. These recommendations also provide the foundation for more proactive business planning within TxDOT, tightly aligned to customer expectations and target levels of service. They also allow MVD to focus on fully institutionalizing the implementation of the internal phase of LACE, while providing more clear expectations for and a lower risk implementation of the external phase of LACE.

H. Applicability of Proposed Recommendations to MCD Enforcement Functions

A secondary goal of this study area was to evaluate and assess the applicability of recommendations from the detailed analysis of the MVD enforcement function to the MCD enforcement function. To facilitate this analysis, a member of MCD's Motor Carrier Operations section participated as a member of the stakeholder team for the study area.

In terms of applying existing practices within the MCD enforcement program to the MVD enforcement function, we determined that the regionalized model for investigators currently used by MCD would be appropriate for MVD and a similar re-organization of MVD on a regional basis has been included as a recommendation.

Likewise, the audit team also assessed the applicability to MCD's enforcement function of our recommendation to make some MVD investigators peace officers. Discussions with MCD staff suggested that there are not currently the same issues related to licensee resistance to an MCD investigator's authority or concerns about the personal safety of investigators that are present within MVD. However, it is recommended that TxDOT continue to monitor this situation and the department may want to seek statutory authority to allow the Transportation Commission to have the authority to commission select staff within all TxDOT investigative functions as commissioned peace officers. This would allow TxDOT at a later date to commission some MCD staff as peace officers if deemed to be required without having to request additional statutory authority.

In addition, there were a number of good discussions between the MVD and MCD investigative staff participating on our stakeholder team. We believe TxDOT should establish an ongoing user group or other forum for continued dialogue and information sharing at the staff level between the two investigative units.

Finally, while both units have independently addressed their current management systems and technology needs to date, we would encourage more discussion and joint planning between the divisions in the future and efforts should be made to develop technology solutions which can meet the needs of both units where this is appropriate (i.e. common hardware for field staff, shared development of Web-based applications for use by licensees, etc.). The Directors of MVD and MCD and their senior staff with support from TxDOT's Information Systems Division should work together to select a common set of tools (i.e. remote computing, remote printing, etc.) for field forces. Staff from MCD should also participate on the advisory group to design the external phase of LACE, with the potential of adopting some elements of this Web-based solution for MCD's own licensees.

Appendix A: State Classification Job Description

Appendix A presents the job descriptions for the Vehicle Size and Weight Specialist I position as well as the Specialist Trainee position as referenced in Chapter II, Study Area 1: Oversize/Overweight Permitting.

Exhibit A-1: Vehicle Size and Weight Specialist I Job Description

PROTOTYPE

State Classification Job Description

VEHICLE SIZE & WEIGHT SPECIALIST I

Salary Group B ____
Class: ____

GENERAL DESCRIPTION
Performs moderately complex customer service work to process and issue permits for oversize/overweight vehicles operating on the state highway system; and perform related work. Employees in this classification spend approximately 75% of their time working directly with external customers. This level requires authority, knowledge, and judgment to answer more complicated requests. Works under general supervision with moderate latitude for the use of initiative and independent judgment. Permits are issued under pressure deadlines as delays create a hardship for the customer.

This classification is distinguished from the Customer Service Representative II by the requirement to research and analyze information to make decisions and resolve complicated issues. Errors in routing could result in vehicle accidents, loss of life, damage to structures or surfaces, and may have potential legal implications.

EXAMPLES OF WORK PERFORMED

- Evaluates and authorizes oversize/overweight permit issuance for vehicles operating on state highways based on analysis of structural capacity, alignment, clearance and proposed route of travel.
- Disallows operations or approves and issues permits based on information obtained. Responsible for accurately issuing complex oversize/overweight permits within short time frames. Sends them to customers at district offices, field offices, ports of entry, trucking companies and truck stops through the Internet, mail, facsimile, or over the counter.
- Consults with county officials, local road authorities and the trucking industry regarding vehicle legal or special permit size and weight limits.
- Conducts in-depth client interviews (clients who may be reluctant to provide accurate information) to determine customers' requests and needs, involving researching and

interpreting laws and technical information, clarifying, explaining, and resolving complex and varied issues, and preparing clear and concise responses for customers.

- Analyzes permit requests received in person, by mail, facsimile or telephone. Determines compliance with permit policy guidelines, statutes, and administrative rules. Communicates verbally and corresponds in writing to obtain and provide information and resolve problems.
- Verifies the completeness of applications and forms; maintains record keeping systems by adding, deleting, or updating information; compiling data and preparing reports.
- Acts as a liaison between customers and OSOW Permit supervisors to clarify issues and resolve permit problems or provide alternate solutions. Researches agency records to analyze data to assist with the revising of administrative rules, law changes, and permit activity reports.
- Coordinate extraordinary permit requests with supervisor, bridge design, district maintenance managers, enforcement staff and outside governmental agencies as necessary. Deals with permits that are non-routine in nature and require research and the use of additional resources to resolve problems.
- High volume telephone contact which requires excellent communication skills. Communication with persons of diverse points of view (who are often irate, confused and/or frustrated) to obtain information and resolve problems. High stress level in issuing accurate, highly technical permits which are non-routine in nature and working under pressure deadlines with frequent distractions. May work irregular hours to meet traffic demands. May work varying shifts to cover office hours from 6 a.m. to 6 p.m., Monday through Friday and 6 a.m. to 2 p.m. on Saturdays.

GENERAL QUALIFICATION GUIDELINES

Experienced in interpreting, explaining, and applying regulations, laws or complex policies to carry out assignments; accessing data using a computerized system; independently handling complaints and upset individuals in a business setting. Good knowledge of: state and federal motor vehicle laws and special permit regulations; characteristics and capacity of the state highway system and of transport vehicles and related equipment.

Incumbent should have knowledge of oversize/overweight transportation permitting, be detail oriented, experienced in reading maps, and have general typing/computer skills. Incumbents will have exceptional problem solving skills, be highly organized, have the ability to multi-task, and understand how to deliver premium customer service.

Attend classroom and on-the-job training to perform the duties of a Vehicle Size & Weight Specialist I. Ability to work without immediate supervision. Ability to deal effectively and professionally with CMV operators and owners, and to work with people in a courteous, firm, and tactful manner. Ability to reason logically, analyze situations accurately and make sound decisions.

Exhibit A-2: Vehicle Size and Weight Specialist Trainee Job Description

PROTOTYPE

State Classification Job Description

VEHICLE SIZE & WEIGHT SPECIALIST TRAINEE

Salary Group B - __
Class: ____

GENERAL DESCRIPTION

Performs basic (entry-level) customer service work to process and issue permits for oversize/overweight vehicles operating on the state highway system; and perform related work. Employees in this classification spend approximately 25% of their time working directly with external customers providing customer service support by receiving and responding to various public inquiries for information and/or oversize and/or overweight permits, and 75% of their time attending classroom and on-the-job training learning the duties of a Vehicle Size & Weight Specialist. Works under close supervision with minimal latitude for the use of initiative and independent judgment.

EXAMPLES OF WORK PERFORMED

- Responds to customer inquires and communicates with the public in person, by telephone, e-mail, or over the Internet.
- Enters information into databases, processes customer applications, and performs other general permitting services.
- Reviews and routes mail and other correspondence.
- May research information to solve customer service problems.
- May prepare and disseminate information concerning permit procedures.
- May receive and process applications and payments for permit services.
- May create and/maintain related activity logs, files, and reports on services.
- Performs related work as assigned.

GENERAL QUALIFICATION GUIDELINES

Experience in customer service, clerical, or administrative support work.

Experience in interpreting, explaining, and applying regulations, laws or policies to carry out assignments; accessing data using a computerized system; handling complaints under close supervision in a business setting.

Incumbent should be detail oriented, have map reading experience, and have general typing/computer skills. Incumbent will have some problem solving skills, be organized, and understand how to provide customer service.

Attend classroom and on-the-job training to perform the duties of a Vehicle Size & Weight Specialist I. Ability to work with supervision. Ability to deal effectively and professionally with people in a courteous, firm, and tactful manner.

Appendix B – High Level Analysis of the Impact of Technology Recommendations on County Tax Assessor-Collector Offices

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To help understand the potential impact of any changes in the revenue sharing formula between the state and the counties as the result of new technologies and other alternative service delivery vehicles for processing vehicle registration and titling fees which bypass the county tax assessor-collectors, the study team developed a set of simple models based on information received from several county offices.

Based on the compensation these counties receive, it suggests that the majority of medium to small transaction volume offices (which is the majority of all county offices) may be operating at close to breakeven or are incurring a small loss when processing VTR transactions. The prototype business model for a small county office under the existing revenue sharing model is included as Exhibit B-1 below.

The larger county offices have a greater volume of transactions processed, as represented by the sample offices within the model. With their economies of scale, it is perceived that larger offices generate a positive revenue flow when processing their registration and titling transactions. This prototype model for the larger offices under the current revenue sharing model is included as Exhibit B-2.

Using the transaction assumptions model as a base, we then evaluated the impact of a 25% decrease in registration and titling transactions on the offices as a result of implementing Internet renewal and dealer titling and registration processing which bypass the county offices. We also adjusted the assumed staffing levels to compensate for the loss of transaction volumes. The offices with larger staff had more staffing options available to them. Even so, both offices appeared to continue to operate at a slight loss. The prototype models for the small and large offices under this revised revenue sharing model are provided in Exhibits B-3 and B-4 of Appendix B respectively.

It should be noted that although the volume of titles processed by the offices in the model shown in Appendix B had been reduced by the implementation of a dealer titling and registration system, the income had not been similarly reduced. This is because we assumed the statute giving the county offices $5 for each title processed in the county will not be changed.

In addition, the county tax assessor-collector offices are currently allowed to keep the funds received from registration and titling for a period of up to 30 days before forwarding them to VTR. This ‘float’ will be reduced by those transactions processed over the Internet, which bypass the county offices. The impact to the county assessors from this reduction is not known. Similarly, we did not assess the impact on the county offices of delayed receipt of county road

and bridge fees which VTR would be collecting for the counties and then periodically transmitting to each county for the Internet transactions.

The study team also modeled the impact of an increase in fees paid to the county tax assessor-collectors for those transactions which will actually be performed by the counties. For purposes of this analysis, we increased the processing fee paid to counties for the transactions which they counties will actually process from $1.90 per transaction to $2.25. At this fee level, it would appear as illustrated in Exhibit B-5 and B-6 of Appendix B the financial gap at this fee level is slightly reduced for both larger and smaller counties. The small county impact also may be understated as the model assumes the county staff is 100% dedicated to VTR work versus being able to perform some county work as well.

Exhibit B-1: Small County Office Model under Current Delivery Approach and Fee Structure

Small County Assessor Office Cost Benefit Stream - Status Quo					
		2007	2008	2009	2010
Titling			**(1% growth)**	**(1% growth)**	**(1% growth)**
# of Titles Processed Each Year		8,000	8,080	8,161	8,242
Title Handling Fee (stipulated by statute)		$5	$5	$5	$5
Revenue from Title Handling		$40,000	$40,400	$40,804	$41,212
Registrations			**(1% growth)**	**(1% growth)**	**(1% growth)**
# of Registrations Renewed Each Year		30,000	30,300	30,603	30,909
Registration Handling Fee ($1.90)		$1.90	$1.90	$1.90	$1.90
Mail Fee at $1.00 Assumes 1/3 of Transactions		$1.00	$1.00	$1.00	$1.00
Revenue from Registrations Handling		$57,000	$57,570	$58,146	$58,727
Revenue from Registrations Mailing		$9,900	$9,999	$10,099	$10,200
Total Revenue from Registrations Handling & Mailing		$66,900	$67,569	$68,245	$68,927
Total Titling & Registration Handling Revenue		$106,900	$107,969	$109,049	$110,139
Costs for Staff of 3 plus County Assessor			**(5% growth)**	**(5% growth)**	**(5% growth)**
2 clerical staff @ $20,000 p.a., plus 30% for benefits and overhead		$52,000	$54,600	$57,330	$60,197
1 senior clerk @ $30,000 p.a., plus 30% for benefits and overhead		$39,000	$40,950	$42,998	$45,147
50% of assessor = $30,000 p.a., plus 30% benefits and overhead		$39,000	$40,950	$42,998	$45,147
Postage: assume 50% of transactions: 19,000 @ 40c (no growth)		$7,600	$7,600	$7,600	$7,600
Total Costs		$137,600	$144,100	$150,925	$158,091
Current Net $ of Revenue Minus Expenses		**($30,700)**	**($36,131)**	**($41,876)**	**($47,952)**
ASSUMPTIONS: Texas population is approx. 23 million and the growth is approx. 1 million every two plus years, or a 2% growth rate. The population growth is fastest in the largest counties. These models assume a 2% in the large office model and a 1% in the small office model. Models assume a 5% growth rate in salaries and overhead expenses.					

Exhibit B-2: Large County Office Model under Current Delivery Approach and Fee Structure

Large County Assessor Office Cost Benefit Stream - Status Quo					
		2007	2008	2009	2010
Titling			**(2% growth)**	**(2% growth)**	**(2% growth)**
# of Titles Processed Each Year		27,000	27,540	28,091	28,653
Title Handling Fee (stipulated by statute)		$5	$5	$5	$5
Revenue from Title Handling		$135,000	$137,700	$140,454	$143,263
Registrations			**(2% growth)**	**(2% growth)**	**(2% growth)**
# of Registrations Renewed Each Year		100,000	102,000	104,040	106,121
Registration Handling Fee ($1.90)		$1.90	$1.90	$1.90	$1.90
Mail Fee at $1.00 Assumes 1/3 of Transactions		$1.00	$1.00	$1.00	$1.00
Revenue from Registrations Handling		$190,000	$193,800	$197,676	$201,630
Revenue from Registrations Mailing		$33,000	$33,660	$34,333	$35,020
Total Revenue from Registrations Handling & Mailing		$223,000	$227,460	$232,009	$236,649
Total Titling & Registration Handling Revenue		$358,000	$365,160	$372,463	$379,912
Costs for Staff of 13 plus County Assessor			**(5% growth)**	**(5% growth)**	**(5% growth)**
10 clerical staff @ $24,000 p.a., plus 30% for benefits and overhead		$312,000	$327,600	$343,980	$361,179
1 supervisor @ $32,000 p.a., plus 30% for benefits and overhead		$41,600	$43,680	$45,864	$48,157
2 part-time clerks @ $12,000 p.a., plus 30% for benefits and overhead		$31,200	$32,760	$34,398	$36,118
50% of assessor = $35,000 p.a., plus 30% benefits and overhead		$45,500	$47,775	$50,164	$52,672
Postage: assume 50% of transactions: 63,500 @ 40c (no growth)		$25,400	$25,400	$25,400	$25,400
Total Costs		$455,700	$477,215	$499,806	$523,526
Current Net $ of Revenue Minus Expenses		**($97,700)**	**($112,055)**	**($127,343)**	**($143,614)**
ASSUMPTIONS: Texas population is approx. 23 million and the growth is approx. 1 million every two plus years, or a 2% growth rate. The population growth is fastest in the largest counties. These models assume a 2% in the large office model and a 1% in the small office model. Models assume a 5% growth rate in salaries and overhead expenses.					

Exhibit B-3: Small County Office Model with 25% of Transactions Processed Through the Internet and Compensation Structure Changed to Reflect this at Current Fee Structure of $2.90 per Transaction for Transactions Processed by County

Small County Assessor Office Cost Benefit Stream w/25% Web Impact - No Fee Change					
		2007	**2008**	**2009**	**2010**
Titling			**(1% growth)**	**(1% growth)**	**(1% growth)**
# of Titles Processed Each Year (6,000 Office & 2,000 Web)		6,000	6,060	6,121	6,182
Title Handling Fee (stipulated by statute)		$5	$5	$5	$5
Revenue from Title Handling		$30,000	$30,300	$30,603	$30,909
Registrations			**(1% growth)**	**(1% growth)**	**(1% growth)**
# of Registrations Renewed Each Year (30,000 in 2007 less 25% from Web activity)		22,500	22,725	22,952	23,182
Registration Handling Fee ($1.90)		$1.90	$1.90	$1.90	$1.90
Mail Fee at $1.00 Assumes 1/3 of Transactions		$1.00	$1.00	$1.00	$1.00
Revenue from Registrations Handling		$42,750	$43,178	$43,609	$44,045
Revenue from Registrations Mailing		$7,425	$7,499	$7,574	$7,650
Total Revenue from Registrations Handling & Mailing		$50,175	$50,677	$51,184	$51,695
Total Titling & Registration Handling Revenue		$80,175	$80,977	$81,787	$82,604
Costs for Staff of 3 plus County Assessor			**(5% growth)**	**(5% growth)**	**(5% growth)**
1 full-time clerk @ $20,000 p.a., plus 30% for benefits and overhead		$26,000	$27,300	$28,665	$30,098
1 part-time clerk @ $10,000 p.a., plus 30% for benefits and overhead		$13,000	$13,650	$14,333	$15,049
1 senior clerk @ $30,000 p.a., plus 30% for benefits and overhead		$39,000	$40,950	$42,998	$45,147
50% of assessor = $30,000 p.a., plus 30% benefits and overhead		$39,000	$40,950	$42,998	$45,147
Postage: assume 50% of transactions: 15,250 @ 40c (no growth)		$6,100	$6,100	$6,100	$6,100
Total Costs		$123,100	$128,950	$135,093	$141,542
Net $ of Revenue minus Expenses with 25% Reduction due to Web Activity		**($42,925)**	**($47,973)**	**($53,306)**	**($58,938)**
ASSUMPTIONS: Texas population is approx. 23 million and the growth is approx. 1 million every two plus years, or a 2% growth rate. The population growth is fastest in the largest counties. These models assume a 2% in the large office model and a 1% in the small office model. Models assume a 5% growth rate in salaries and overhead expenses.					

Exhibit B-4: Large County Office Model with 25% of Transactions Processed Through the Internet and Compensation Structure Changed to Reflect this at Current Fee Structure of $2.90 per Transaction for Transactions Processed by County

Large County Assessor Cost Benefit Stream w/25% Web Impact				
	2007	2008	2009	2010
Titling		**(2% growth)**	**(2% growth)**	**(2% growth)**
# of Titles Processed Each Year (20,250 Office & 6,750 Web)	27,000	27,540	28,091	28,653
Title Handling Fee (stipulated by statute)	$5	$5	$5	$5
Revenue from Title Handling	$135,000	$137,700	$140,454	$143,263
Registrations		**(2% growth)**	**(2% growth)**	**(2% growth)**
# of Registrations Renewed Each Year (100,000 in 2007 less 25% from Web activity)	75,000	76,500	78,030	79,591
Registration Handling Fee ($1.90)	$1.90	$1.90	$1.90	$1.90
Mail Fee at $1.00 Assumes 1/3 of Transactions	$1.00	$1.00	$1.00	$1.00
Revenue from Registrations Handling	$142,500	$145,350	$148,257	$151,222
Revenue from Registrations Mailing	$24,750	$25,245	$25,750	$26,265
Total Revenue from Registrations Handling & Mailing	$167,250	$170,595	$174,007	$177,487
Total Titling & Registration Handling Revenue	$302,250	$308,295	$314,461	$320,750
Costs for Staff of 10 plus County Assessor		**(5% growth)**	**(5% growth)**	**(5% growth)**
8 clerical staff @ $24,000 p.a., plus 30% for benefits and overhead	$249,600	$262,080	$275,184	$288,943
1 supervisor @ $32,000 p.a., plus 30% for benefits and overhead	$41,600	$43,680	$45,864	$48,157
1 part-time clerk @ $12,000 p.a., plus 30% for benefits and overhead	$15,600	$16,380	$17,199	$18,059
50% of assessor = $35,000 p.a., plus 30% benefits and overhead	$45,500	$47,775	$50,164	$52,672
Postage: assume 50% of transactions: 51000 @ 40c (no growth)	$20,400	$20,400	$20,400	$20,400
Total Costs	$372,700	$390,315	$408,811	$428,231
Net $ of Revenue minus Expenses with 25% Reduction due to Web Activity	**($70,450)**	**($82,020)**	**($94,350)**	**($107,481)**
ASSUMPTIONS: Texas population is approx. 23 million and the growth is approx. 1 million every two plus years, or a 2% growth rate. The population growth is fastest in the largest counties. These models assume a 2% in the large office model and a 1% in the small office model. Models assume a 5% growth rate in salaries and overhead expenses.				

Exhibit B-5: Small County Office Model with 25% of Transactions Processed Through the Internet and Compensation Structure Changed to Reflect This at a Revised Fee Structure of $3.25 for Transactions Processed by the County

Small County Assessor Office Cost Benefit Stream with 25% Web Impact at $3.25 Fee					
		2007	2008	2009	2010
Titling			**(1% growth)**	**(1% growth)**	**(1% growth)**
# of Titles Processed Each Year (6,000 Office)		6,000	6,060	6,121	6,182
Title Handling Fee (stipulated by statute)		$5	$5	$5	$5
Revenue from Title Handling		$30,000	$30,300	$30,603	$30,909
Registrations			**(1% growth)**	**(1% growth)**	**(1% growth)**
# of Registrations renewed each year (22,500 Office)		22,500	22,725	22,952	23,182
Registration Handling Fee ($2.25)		$2.25	$2.25	$2.25	$2.25
Mail Fee at $1 Assumes 1/3 of Transactions		$1.00	$1.00	$1.00	$1.00
Revenue from Registrations Handling		$50,625	$51,131	$51,643	$52,159
Revenue from Registrations Mailing		$7,425	$7,499	$7,574	$7,650
Total Revenue from Registrations Handling & Mailing		$58,050	$58,631	$59,217	$59,809
Total Titling & Registration Handling Revenue		$88,050	$88,931	$89,820	$90,718
Costs for Staff of 3 plus County Assessor			**(5% growth)**	**(5% growth)**	**(5% growth)**
1 full-time clerk @ $20,000 p.a., plus 30% for benefits and overhead		$26,000	$27,300	$28,665	$30,098
1 part-time clerk @ $10,000 p.a., plus 30% for benefits and overhead		$13,000	$13,650	$14,333	$15,049
1 senior clerk @ $30,000 p.a., plus 30% for benefits and overhead		$39,000	$40,950	$42,998	$45,147
50% of assessor = $30,000 p.a., plus 30% benefits and overhead		$39,000	$40,950	$42,998	$45,147
Postage: assume 50% of transactions: 15,250 @ 40c (no growth)		$6,100	$6,100	$6,100	$6,100
Total Costs		$123,100	$128,950	$135,093	$141,542
Net $ of Revenue minus Expenses with 25% Reduction due to Web Activity		**($35,050)**	**($40,020)**	**($45,273)**	**($50,824)**
ASSUMPTIONS: Texas population is approx. 23 million and the growth is approx. 1 million every two plus years, or a 2% growth rate. The population growth is fastest in the largest counties. These models assume a 2% in the large office model and a 1% in the small office model. Models assume a 5% growth rate in salaries and overhead expenses.					

Exhibit B-6: Large County Office Model with 25% of Transactions Processed Through the Internet and Compensation Structure Changed to Reflect This at a Revised Fee Structure of $3.25 for Transactions Processed by the County

Large County Assessor Office Cost Benefit Stream for 25% Web Impact at $3.25 Fee					
		2007	2008	2009	2010
Titling			**(2% growth)**	**(2% growth)**	**(2% growth)**
# of Titles Processed Each Year (20,250 Office)		20,250	20,655	21,068	21,489
Title Handling Fee (stipulated by statute)		$5	$5	$5	$5
Revenue from Title Handling		$101,250	$103,275	$105,341	$107,447
Registrations			**(2% growth)**	**(2% growth)**	**(2% growth)**
# of Registrations Renewed Each Year (75,000 Office)		75,000	76,500	78,030	79,591
Registration Handling Fee ($2.25)		$2.25	$2.25	$2.25	$2.25
Mail Fee at $1 Assumes 1/3 of Transactions		$1.00	$1.00	$1.00	$1.00
Revenue from Registrations Handling		$168,750	$172,125	$175,568	$179,079
Revenue from Registrations Mailing		$24,750	$25,245	$25,750	$26,265
Total Revenue from Registrations Handling & Mailing		$193,500	$197,370	$201,317	$205,344
Total Titling & Registration Handling Revenue		$294,750	$300,645	$306,658	$312,791
Costs for Staff of 10 plus County Assessor			**(5% growth)**	**(5% growth)**	**(5% growth)**
8 clerical staff @ $24,000 p.a., plus 30% for benefits and overhead		$249,600	$262,080	$275,184	$288,943
1 supervisor @ $32,000 p.a., plus 30% for benefits and overhead		$41,600	$43,680	$45,864	$48,157
1 part-time clerk @ $12,000 p.a., plus 30% for benefits and overhead		$15,600	$16,380	$17,199	$18,059
50% of assessor = $35,000 p.a., plus 30% benefits and overhead		$45,500	$47,775	$50,164	$52,672
Postage: assume 50% of transactions: 51000 @ 40c (no growth)		$20,400	$20,400	$20,400	$20,400
Total Costs		$372,700	$390,315	$408,811	$428,231
Net $ of Revenue minus Expenses with 25% Reduction due to Web Activity		**($77,950)**	**($89,670)**	**($102,153)**	**($115,440)**
ASSUMPTIONS: Texas population is approx. 23 million and the growth is approx. 1 million every two plus years, or a 2% growth rate. The population growth is fastest in the largest counties. These models assume a 2% in the large office model and a 1% in the small office model. Models assume a 5% growth rate in salaries and overhead expenses.					